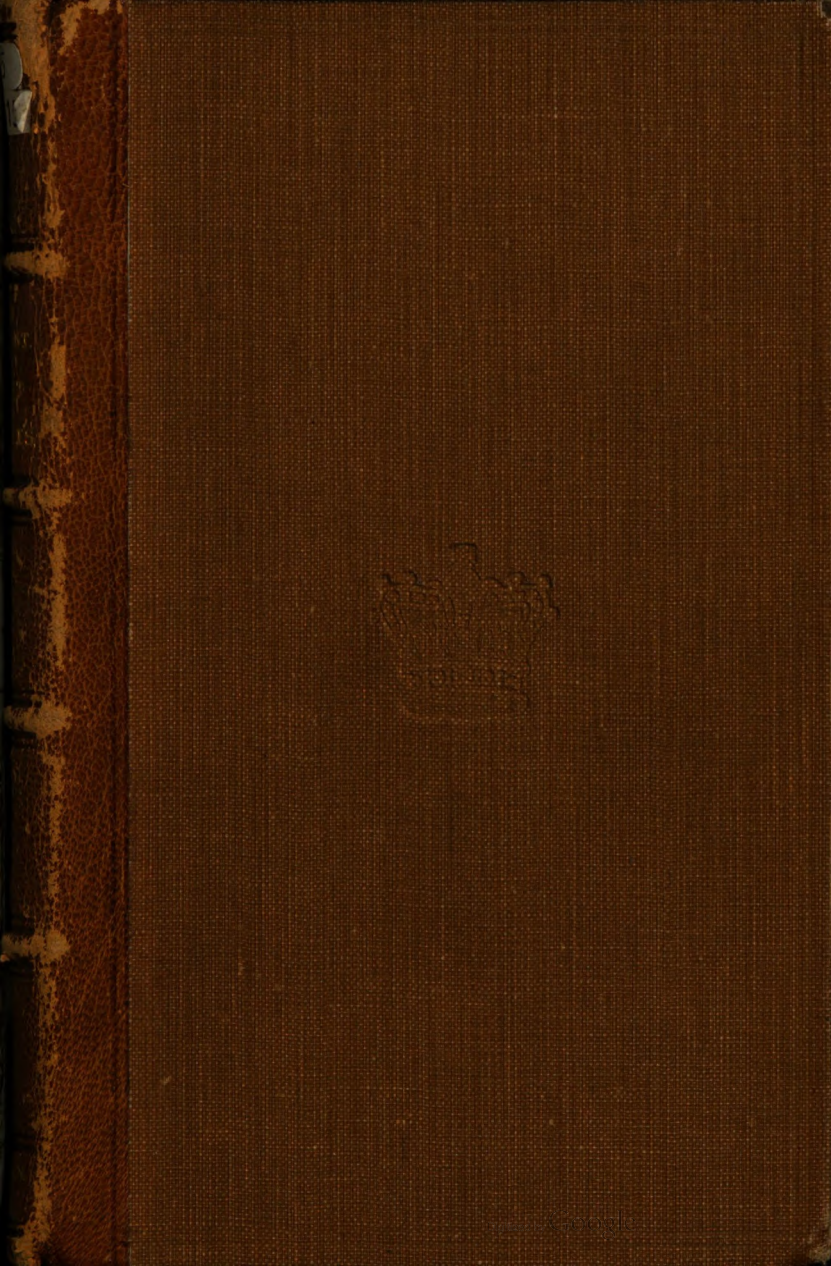

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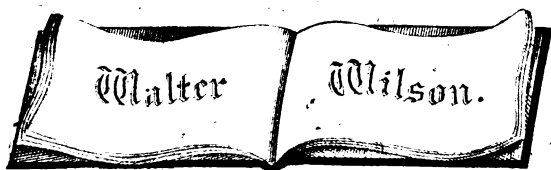
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775e.15.

T H E
Spirit of Diseases;
O R,
Diseases from the Spirit:
Laid open in some
OBSERVATIONS
Concerning
MAN,
And his DISEASES.

Wherein is shewed how much the
Mind influenceth the Body in causing
and curing of DISEASES.

The whole deduced from certain and
infallible Principles of Natural Reason
and Experience.

By *FRANCISCUS MERCURIUS*
Baron of *HELMONT*.

The First Part.

LONDON, Printed for Sarah Howkins in
George-Yard, in Lombard-street, 1694.

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only design used by the FBI in the past was the FBI seal. The FBI seal is a circular emblem with the words "FEDERAL BUREAU OF INVESTIGATION" and "DEPARTMENT OF JUSTICE" around the perimeter. In the center is a shield with a scale of justice, a sword, and a laurel wreath. The shield is flanked by two eagles. The seal is used on the front cover of the FBI Handbook, the FBI Manual, and the FBI Directory.

CONFIDENTIAL

[illegible]

Franciscus Mercurius

VAN

HELMONT,

Wisteth all Health

TO THE

READER.

AS Mankind in the several Ages
of the World, have always very
much differ'd in their manners
and way of living; so likewise if we
take a view of their Actions, we shall
find them no less various. For proof
whereof it will be sufficient to take a
view of the Writings left to us, by
Authors that liv'd at a considerable
Distance of Time from one another,

A 3

which

The Preface

which we shall find vastly differing not only as to their Language, but chiefly in their stile and manner of expression. There was a time, when the mode of writing in Vogue, was altogether Parabolical, Mystical and Enigmatical: another when men began somewhat to unfold their stile, and to express themselves more copiously, but confusedly withal. And if we betake our selves to the Writings of our modern Authors, we shall find them full of flourished and soft-flowing expressions, and persuasive, speculative reasons, such as rather exhibit the mask or shadow of Truth, than discover its real and substantial Beauty to us; as finding that this way of writing doth gain them more credit and applause with the generality of People, than that more difficult and troublesome, which after much labour and study presents us with the very truth of things drawn from their Causes, and delivers the same in distinct and plain expressions. But I having never made it my aim to catch at the breath of the illiterate multitude,

or

to the Reader.

or of those who are conceited of their own learning, but on the contrary have level'd my thoughts at this mark, that they who earnestly apply themselves to the search of Truth, might at last extricate themselves out of the winding Mazes and Mæanders of Physick and Philosophy; in order to which end I have here given a short account (so as to leave the sagacious pursuers of Truth scope enough, by following these traces, to make a more full and particular discovery of whatsoever is required to the knowledge of the Nature of Man, and his Diseases) of the Maladies incident to Mankind, and their Causes, deduced from reasons of incontestible and unmoveable truth; and over and above have shewed, that there is nothing in the universal nature of things, which is not the effect and product of the same principles I have here laid down.

Indeed when we attentively consider, that all the Beings of the Universe do so amicably and harmoniously co-operate, and that all its parts do so fitly conspire

The Preface,

have been for me so closely to follow Nature through all her secret windings and immense variety of objects, as to be assured at last that they all were the product of one only cause, and that whatsoever is in the universe may be deduced from the same. For before I could arrive to this point, I was fain by assiduous cogitation and contemplation, in conjunction with long experience, to pry into the abstruse works of nature. Besides, having overcome all these difficulties, it proved no small hindrance and discouragement to me, that after I had found out Nature's secret path: I, for many years together met with but very few who were willing so much as to consider or examine what I offer'd to them, or were capable of it, by reason of their prepossessed Judgments. Neither did I much wonder at it, seeing that most men are so little concern'd whether what they have learnt be true or false, that they had rather follow the sense of their Leader, than to put themselves to the trouble of a studious and painfull review.

to the Reader.

vein. However I cannot say that my labour herein hath proved altogether fruitless, because it hath procur'd me some friends, who did not onely clearly apprehend my thoughts, but were also able from my assigned Principles to deduce the truth of things.

But for all this, when I consider the beaten Road of most Physicians, and the common Method of Curing, I have no reason to expect that this Discourse should meet with a kind reception from them; because the Principles here laid down, if ever they should come to espouse them, would oblige them to abandon their accustomed method, and to new-model the whole System of their practise, which will be a thing too painful and troublesome for those who suffer themselves to be carried headlong by inveterate custom and opinion. Besides, if ever they should make it their business to know thoroughly the cause of every disease, before they went about to prescribe their Receipts against it, this would much diminish their reputation,
for

The Preface

for as much as the ready and extempory prescribing of Apozemes, Purges, Clysters, and other such like, is look'd upon to be a pregnant instance of a great presence of Mind, and absolute Experience; though indeed they be equally ignorant, whether the Effect of them will prove beneficial or hurtfull to their Patients. Wherefore I have but small reason to expect from these conceited Physicians, that ever they should spend much of their Time and Labour in searching out the true Grounds of Medicine, seeing that the White they shoot at, is not Truth or the welfare of their Patients but gain and profit, being but little concern'd what happens, as long as large Fees flock in apace to their Pockets.

These are the reasons have moved some Physicians to brand this little Treatise, with their ignominious Reflections; though I dare challenge any one of them, or all of them together to shew me any one Contradiction, or false Proposition therein contained, or to single me out any Disease, the reason whereof cannot

to the Reader.

cannot be given from the Principles here asserted: Tea, I challenge them to produce any thing whence the Nature of Diseases, without any Clashing or Contradiction, may be derived, and whereby all their Symptoms and the Difficulties about them may be explained and resolved. But then they will not think to put me off with a ~~company~~ of fine Words, when that which I expect from them is solid reason. But I had as good say nothing, being well assur'd that this sort of men will never answer this my challenge. Now if we would take a scantling of their gross Ignorance; let us suppose several of them sent for to consult about the Disease of the same Patient; good God, what jarring and difference shall we find in their Judgments, so that scarcely any two will be found amongst them that agree in their Sentiments about the same Disease, and much less about the Causes of it, wherein commonly they are as distant, as the East is from the West. Now this being much truer than I could wish

The Preface

wish it was, who would ever trust his Health, yea, and Life too, with such blind and ignorant Guides, whose Art is merely conjectural? But to the end I may put this out of doubt with my Reader, I will onely desire him to consider, that when these Physicians fall sick themselves, though in the full use of their Understanding, yet declare themselves ignorant of the Cause of their Disease, and therefore send for two or three of their own Gang, to feel their Pulse, cast their Water, to the end that, if at the worst, they cannot recover them, they may at least have the Comfort of dying according to the best Forms and Method. Surely had they but so much as a rough-draught in their Heads of the Nature and Cause of their Distemper, they would never betake themselves to the Advice of others, but consult their own Understandings. And pray what can other Patients hope for from such Physicians, who are destitute of Knowledge enough to help themselves.

But

to the Reader.

But what is here said, I would have understood of the common sort of Physicians; for in divers Countries I have met with some very honest and ingenuous Men of that Profession, who did not onely confess, that there was nothing of Truth or Certainty in the common way of practising Physick, but also exerted the utmost of their Endeavours, and left nothing unattempted whereby they might reduce this worthy Profession into an Art of certain and immutable Truth. And these are the Men who have frequently consulted me about these Matters, and it is for their sakes that I have writ this Treatise, and not for those that follow the common Road and Method of Physick, whose Censures I despise. And the less esteem I have for the vulgar Method, the more highly I value those that have found out any thing that is real and praise-worthy in Physick, amongst whom I cannot but make mention of John Conrad Amman Doctor of Physick, who by his Industry hath found out a way whereby such

as

The Preface, &c.

as are born deaf may with a certainty, scarce inferiour to that of Mathematical Demonstration, learn to read readily, and to take in the Sense of others, not at their Ears, but at their Eyes, and to express their Minds with an articulate Voice; of which to pass by other Instances, I my self have been an Eye-witness at Harlem, in the Daughter of Peter Koolard a famous Merchant of that City, and with which I was the more pleased, because I found this usefull Invention of his, to agree very much with what I have delivered in my Alphabet of Nature. Herewith Reader I take my leave, wishing thee heartily Farewell.

At Amsterdam the 20th.
of August. 1692.

O B-

OBSERVATIONS

Concerning

MAN,

AND THE

Cause of Diseases.

EXperience teacheth, that they who are in the pursuit of Sciences; must spare neither Pains, nor Diligence for the attaining of them; because the many Objects that present themselves at once to our view, lead us into a Maze of uncertainty, not knowing what to lay hold of for a sure ground, to attain true knowledge.

B

In

2 Observations concerning

In my Judgment there is no better Principle can be pitch'd upon for the acquiring of knowledge, than (according to the saying of *Thales*) *to know our selves*; and Experience doth abundantly confirm this, for we find that the reason why so few attain to a true and experimental knowledge of themselves, is, because instead of clearing up the Light that is hid in them, they do more and more darken and cloud it, by their pursuing of Truth in things without them, and so amuze themselves about the outward Bark or Bodies, supposing them to be the Causes of those Effects they see produc'd in the World; tho' not one of them can so much as tell what a Body is, whereof it consists, or what that is which doth unite, or link the parts of it together; now it is utterly impossible for them to know the Nature of Bodies, and their different operations, as long as they do not reach their kernel, that is the cause of them. Wherefore he that would be a right and genuine

nuine Enquirer into Truth, must first of all search into his own Essence, and consider that his Body is continually maintain'd and govern'd, and all things produc'd in him by his Spirit; the Body indeed, being nothing else but an effect of the Spirit, as shall be shewed in the sequel of this Discourse;

This being well consider'd and comprehended in all its parts and circumstances, we shall easily attain to the knowledge of other things, both within and without us; seeing that all things have but one Cause, and consequently comprise but one and the same Truth, tho' the one partakes of more perfection, the other less, suitable to the different efficiency of the Spirit that is in it.

True it is, that tho' all Creatures have but one Cause, yet at first sight they are not equally knowable to us, because frequently we fail of discerning their Properties, manner of Production, or other Circumstances, and by this means their Efficiency remains often unknown to

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us. Wherefore there can be no better way to attain the knowledge of any thing, than to enquire what the Efficiency of it is, what form or appearance it hath, whence it proceeded, how it is produc'd, and into what it may be resolv'd at last : For if we put these together, as so many parts that constitute the whole, we shall arrive to the knowledge of the thing we are in quest of.

And to the end I may not seem by these words, which point us to the right Investigation of the Nature of things, to speak any thing which is either un-intelligible, or not practicable ; I shall in these my thoughts about divers Subjects, take into consideration their several Circumstances, Effects, and manner of Production, or Generation, which will lead us to the Principle whence they proceed.

§ 1. It is proper when we are about to treat of Man and his Parts, to consider his Original, and by whom he was produc'd.

§ 2. No

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§ 2. No other Principle can be imagin'd to have been the Original of all Creatures, save onely that Being, which hath the Power of creating all things.

§ 3. Every one is conscious, that as he did not at first create or produce, so he cannot preserve himself in the same State. He finds also by Experience, that the Creatures neither are, nor can subsist of themselves; for could they subsist of, or from themselves, then would they no longer be Creatures, but Creatours; because Self-subsistancy cannot be conceived, but in conjunction with all other perfections, and consequently with the Power of creating, and where this is not, those Beings must be the Product of some other Cause, and consequently not subsist of themselves, but by some other. Now all those Beings that are not Self-subsistant, nor can perpetuate themselves in the same State, come under the notion of Creatures.

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§ 4. The Being which is Self-subsistent, and consequently comprehends all perfections, must amongst the rest possess this also of being uncreated, and the Creatour of all things.

§ 5. For as much therefore as this most perfect Being doth produce and create all things, it is evident from

Vid. *Treatise
of the Divine
Attributes,*
p. 48.

hence that the word *to create*, cannot import the production of a thing out of nothing, but out of, or by the Power or Spirit of this most perfect Being, which we call God. Now this Power or Spirit of God, or whether it be call'd his Command or Will, is Essential; because in the most perfect Being there can be no defect, and therefore no Nullity or Non-entity, but on the contrary all must be Essential, and ever operative and actual; for if God were not continually operative, he would be changeable, which is inconsistent with his Perfection.

§ 6. More-

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§ 6. Moreover, if *to create* signifie the Production of a thing out of nothing, then is it an absolute un-intelligible Expression, neither can any Man know what is meant by it, because no Thought or Conception can be fram'd of nothing; whereas the use of words is to conveigh to us the signification and understanding of things, whereof they are the marks and indications.

§ 7. Scripture also contradicts this false and inconsistent Signification of this word; for it expressly teacheth us, that *to create, is to produce something visible, out of that which is spiritual or invisible.* Thus Gen. I. I. we read, that *In the beginning God created the Heavens and the Earth;* but it is not said that God created the Waters, or the Spirit that moved upon the Waters; but on the contrary it is plainly enough hinted to us, that out of the Waters, by means of the Spirit that moved

Vid. *Treatise of the Divine Attributes,*
P. 169.

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upon them, the Heavens and Earth were produced: So that the 2d Verse informs us, what that was out of which the Heavens and the Earth were created; and for a further clearing hereof, it is said Verse 9. *Let the waters under the Heavens be gathered unto one place, and let the dry land appear.* Which is yet further explained by that of St. Peter, in his 2d Epistle 3. 5. *For this they willingly are ignorant of, that by the Word of God the Heavens were of old, and the Earth consisting out of the water, and in the water.* We read also, Gen. 1.21. *And God created great Whales, and every living Creature that moveth, which the waters brought forth abundantly after their kind; and every winged fowl after his kind.* Now it is clear as the Sun, that by the word *created* cannot be meant, that God produced these out of nothing; because in the foregoing Verse, it is said: *Let the waters bring forth the moving Creature that hath life, and Fowl that may fly above the Earth.* Which words assure

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assure us, that the word *Created* in the following Verse signifies a Bringing forth out of the Waters.

But for a further proof, that *to create* signifies the bringing forth of something visible and tangible, from Invisibles and Spirituals, (*viz.* from the Heavenly waters, for the Waters are twofold, those above, and the other beneath the Firmament, the upper being of a more spiritual Nature than those upon the Earth) let us consult the plain words of the Authour of the *Epistle to the Hebrews*, Ch. II. v. 3. *Through Faith we understand that the Worlds were framed by the word of God, so that the things which were seen, were not made of things which do appear, and consequently of invisible and spiritual Things.*

§ 8. Conclude we therefore that all Creatures were brought forth out of the Water, by the Spirit which moved upon them, for after that the Spirit of God had moved upon the Waters, the Heavens and Earth were created

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created out of them, as we have just now shewed from the context of *Genesis*, and out of the Earth were brought forth Stones, Minerals, Herbs, Trees, Beasts, and Men.

§ 9. And like as all Creatures were by the Spirit brought forth out of the Water, so the Nature of all Creatures informs us, that they consist of a living Fire, and a watry Essence, which I have demonstrated concerning the Nature of the Heavens, Earth, Stones, Metals, Minerals, &c. in my *Thoughts upon Natural Philosophy*.

See *Div. Attrib.* p. 169.

The same Truth is confirmed to us, by those that have the Ague, or their Bodies otherwise indispos'd, that they are sometimes cold, and at other times hot; whereas when both these qualities do work orderly and harmoniously together, they are neither sensible of heat nor cold, but onely of a temperate and pleasing warmth. Moreover, if Man did not consist of a fiery and watery Essence, it would be impossible for

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for him to be either hot or cold ; because nothing can grow hot or cold, except it be partaker of the Essence of them both.

Now that there is in Man such a living fiery Essence, the following Experiment may convince us. Take the Urine of some that drink little (for that is the best for this purpose) and let it stand for some time, and then evaporate it to the consistence of Honey, afterwards mix the same with thrice as much of the Powder of Charcoal, or Brick-dust, put this matter into a strong coated Retort, that will endure the Fire, and drive it over with a Reverberatory Fire into a large Receiver, that hath Water in it, and at last you will see a bright blewish Smoak come over, which in the Water turns into a thick Substance, but when taken out thence it shines and burns, and is commonly known by the Name of *Phosphorus*.

Neither is this Fire onely found in Man's Urine, but also in every Part and Member of him, which are all of them

them preserv'd in their due State and Temperament by means of this fiery Life. And therefore it is, that when some Persons comb their head in the dark, as it were sparks of Fire are seen to proceed from them; and that those who are struck on the Eye, perceive the Appearance of a flash of Fire; as likewise that when a sick Person rubbing his Eyes, has a fiery Light represented to him, it is a hopeful sign of his Recovery, for as much as it indicates that his Life, which is his Fire, is as yet strong and vigorous in its acting, and endeavour to surmount the Disease. Yea it hath been found by Experience, that when Persons of a dry and fiery Nature or Complexion (which are expressions commonly us'd) have their Bodies rubb'd in the dark, that blue Flames and Sparks are shaken out from the Towels they have been rubb'd with.

Neither is this onely confirm'd to us by Experience, that all things whatsoever consists of a fiery and watery Essence, (which two Essences, be-
cause

cause all things are generated of them, may very properly be called the Male and Female Essence) but the same is also ratified by the express words of Scripture, *Gen. 1. 27.* which tells us, that *God created Man in his own Image, in the Image of God created he him, Male and Female created he them.* In which words we are inform'd, that God created them (our first Parents) Male and Female. It is not said that God created the one of them a Male, and the other a Female, but that God created both of them Male and Female ; not that we are to understand by this manner of speaking, that our first Parents were Hermaphrodites , as some Scoffers might conclude from hence, but that every Man, and so our first Parents, does consist of a masculine or fiery, and a female or watery Essence ; the masculine or fiery Essence being predominant over the watery in Males, and the watry over the fiery in Females. And accordingly Experience tells us, that Men are stronger and
more

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more fiery than Women, and therefore are appointed their Head, and to have Dominion over them.

A further Argument to prove, that *Adam* contain'd in himself a male and female Essence, is this, that the Woman was taken out of *Adam*; for *Gen. 2: 22.* informs us, *and the Rib* (or as the word does also signifie a *Pillar*, which very properly may denote the Back-bone, for as much as the same like a Pillar doth support the Body of Man) *which the Lord God had taken from Man, made* (builded) *he a Woman*; and the Hebrew word *בנה* to build, informs us, that *Eve* was formed of that in *Adam*, whereof all Children are formed, to wit, out of his Loins, for in the Hebrew Children are called *בנים*, which is deriyed from the same word *בנה*. Conclude we therefore, that seeing *Eve* was made or built of the Rib of *Adam*, he must needs have had both Essences concealed in him.

§ 10. And

§ 10. And when the *Earth* was without *Form* and *void*, the first thing that God brought forth from it was the *Light*, or *Day*, in opposition to the *Darkness*, or *Night*, Gen. 1.3,4,5. And vers. 16. 19. We read, that two great Lights were made, *the greater Light to rule the Day, and the lesser Light to rule the Night, and the Stars also*, which are Nocturnal lights appertaining to, and resorting under the Moon : Now this affords us a further Demonstration, that the World must consist of a fiery and watery Essence, and of no more than these two, because we find the same onely distinguish'd into Day and Night, which are governed or superintended by two different Luminaries, the one having dominion over the Day, and the other over the Night. Now it is a thing known to all, that the Sun which rules by Day is a fiery Essence, and the Moon on the contrary a cool watery Essence (of which see my *Thoughts about Natural Philosophy*) besides it is a thing well known to all Sea-faring Men,

Men, that the Moon has dominion over the Waters, because it causeth them to swell and increase, as is apparent in the Spring-tides, which happen at the Full-moon, which shews that the Moon hath communication with the Waters, and consequently must be partaker of their Nature.

§ 11. And for as much as the Heavens and Earth consist of these two Essences the fiery and

Vid. Div. Attrib. p. 172.

watery, it follows, that all Creatures proceeding from the Earth, must likewise consist of the same (as hath been shewed § 9.) and when any thing becomes defective in its fiery Essence, so as that it cannot, as formerly, form and subdue the watery Essence for the support of its Body, then the Body decays and dies.

§ 12. Now as the Sun by its Fire doth excite, and quicken every thing

Vid. Div. Attrib. p. 161.

upon Earth, as appears in Summer, when the Sun is near

near us, so likewise the Fire, which is proper and peculiar to every Creature, does preserve it in Life, which we can no way better experience than in our selves: For we find that when this Heat or Warmth begins to decrease in its wonted efficiency or activity, we grow chilly and cold; and when the same ceaseth all together, we die. Conclude we therefore, that *the Fire which preserves and maintains our life, and without which no body can subsist, must of necessity be the life it self of every Creature*: For seeing that all of them consist of Fire and Water; as soon as the Fire in any of them ceaseth from its wonted Activity, they immediately die and perish.

§ 13. This fire or life which preserves the Creatures in their Beings,

and (as we find by experience), doth form our very thoughts, must be

Vid. Div. Attrib. p. 131.

such an Essence, as can pierce and penetrate all Bodies whatsoever; for were there any that it could not pe-



netrate,

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netrate, it would never be able to illuminate or quicken the same, and so that Body would have the Power of giving Life to its self, which is not onely contrary to experience, but also implies a contradiction according to § 3 and 8. Now that which enters, and pierceth through Bodies, cannot be a Body, because it is impossible for one Body to penetrate another, without taking up more place than it did before; wherefore that which makes Bodies, and can both enter, and pass through them, must be a Spirit.

§ 14. Having therefore demonstrated, that the Fire of every Creature is spiritual, and seeing that there are many kinds of Fire, we now proceed to shew the Differences thereof. All sorts of Fire may be reduced to one of these three, *Viz. the Natural Fire of the Creatures, the Fire of the Sun,* and lastly *Artificial,* (otherwise called Culinary) *Fire.*

The

The Natural Fire of the Creatures, is that Vital flame which according to its operative Virtue, forms its own Body, and is nothing else but the Spirit, or fiery Life of all Creatures; which Fire of the Creatures is natural, as long as it doth not deviate from its proper efficiency and order, nor forced into a violent Motion, which makes it to burn, and as it were, burst forth into a Flame.

Artificial Fire is nothing else but the Fire of the Creatures, when by violence and swift Motion it is hindered in its natural Efficiency, which hindrance or disturbance is nothing else but a swift Mortification; by means of which suddain dying, the Fire of the Creatures, which by burning cannot be annihilated, becomes the sooner advanced to a new Birth, which otherwise by a slow Death or Corruption would not arrive at a new Life, till after a much longer time. And like as the Creatures by an external violent Motion, may be turned to an Artificial Fire; so likewise

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any one may by a suddain Passion, or some other way, put his inward Fire into such a Motion, as thereby to make it cease from its present orderly Operation, and so die suddainly. Whence it follows, that the *Fire* we call *Artificial*, to speak properly, is *not*, *neither can it be made by us*, as being nothing else but a Destruction of Bodies, and a swift Motion; by means whereof the Fire of Creatures either dies, or changeth its Activity or Operation.

The Fire of the Sun, is that which excites the mortified Fire of the Creatures, and awakes it into a new Birth, *which Solar Fire never ceaseth to work*, but always operates after one and the same manner, in order to advance this World to its perfection. Wherefore it is necessary for the Sun to be in continual motion, that by means thereof it may excite all Creatures, and vivifie them in due time. For if the Sun should always abide in the same place, and from thence continually dart its Rays to one quarter of
the

the Earth, it would burn and consume all that was there, and bring forth nothing to a perfect Birth, as we find by experience in a Burning-Glass; which by concentrating the Beams of the Sun, doth kindle a flame, which effect cannot be produced by Artificial Fire; because the Fire of the Sun is more constant and unchangeable in its Activity; whereas on the contrary all artificial or made Fires, are continually changed.

§ 15. And for as much as *Salt* doth greatly partake of the Nature of Fire, it will not be improper to treat of it here. It is certain, *that where-soever* Fire is, there *Salt is also*; whether it be in the Air, Earth, Vegetables, Animals, &c. For which reason probably the Greeks signified *Salt* by the word *αλας*, and the *Sun* they call'd *Ἥλιος*, by which likeness of Names, they would represent to us the likeness of their Natures. And for the same reason the Romans called *the Sun*

2.2 Observations concerning

Sol, and *Salt Sal*, and some of the Antients also have told us, that *the Sun was the Salt of the World*.

Now that wheresoever Fire is found, there Salt is also, Experience teacheth us in Sweat, Urine, &c: which do not onely contain Fire, as the *Phosphorus* shews, but Salt also; and the saller any ones Sweat or Urine is, the more lively and vigorous he is also; so that *Salt is a consequent or birth of the Fire*, for we find that Fire turns to Salt, whereof we have a proof in Pot-ashes, called by Chymists *Cineres Clavellati*; for when Wood is burnt with a Reverberatory-fire, it yields more of an Alkalious Salt, than when it is consum'd with an ordinary open Fire; because when a Reverberatory-fire is used, part of the Fire becomes precipitated into Salt, and doth not fly away, as when the Fire is open; and this Alkali may be changed into Salt-petre, out of which the Refiners extract common Salt; both which Salts are found in all Creatures, of which the Salt-petre is the more fiery,

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fiery, and the common Salt the more bodily.

§ 16. Having thus demonstrated that Salt derives its Original from the Fire, because that Fire is changed into Salt, we shall now further illustrate the same Truth, by shewing, *Viz.* that *Salt is also turned into Fire* : For we find that when at any time the Sea over-flows the Land, that the Salt it leaves upon it, doth after some Years make it exceeding fruitful, which could not be, except that the Salt were turned, for the most part of it, into a living Prolifick-fire, because nothing can be produc'd but by its own proper living Fire, as appears from § 12, and shall be further demonstrated § 34---41.

§ 17. When we heedfully consider this Effect of Nature, *Viz.* that *the Fire doth produce Salt, and that Salt reciprocally is in part chang'd into a Prolifick and fructifying Fire*, we shall surely be guided to a clearer understanding

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standing of the Words of our Saviour, Mark 9. 49. *Every one shall be salted with Fire.* And this Fire or Life which is in the Salt, is properly that which preserves the Creatures from Putrefaction; for when this Life hath once left the Salt, it is no longer of use to season things withall, and therefore we read Vers. 50. *But if the Salt hath lost its Savour, viz. (its living Virtue whereby it preserves Meat from Corruption) wherewith shall it be salted? or as it might be rendred, how will you be able to season any thing with it, so as to preserve it from Corruption?* And Matth. 5. 13. we are told, that *it is good for nothing but to be cast out, and to be trod under foot by Men.* For being no longer of use, it is cast out upon the Earth, that it may die there in order to attain a new Birth, and so become usefull and fruitfull as before.

§ 18. As every Creature hath its vivifying Spirit or Fire, so it must likewise have its female

Vid. Div. At-
trib. p. 171.

female or watery Essence, according to what hath been proved § 7, 8. viz. that all things are a Product of the Water. Which is confirm'd to us by Experience in Mines, that die or putrifie into Worms, which Worms devour the Mountains (even as wood breeds Worms that eat up the wood) and by this means several vast Arches and Passages are made under ground: which Arches do afterwards give forth a water, which dropping down continually congeals in process of time, into great Stones, formed like Pillars, which stony Pillars abide the Fire; whereas the Water whereof they are congealed, doth proceed from Lime-stone. This is commonly found in the Dukedom of *Sultzbach* in the Upper Palatinate, according as I have taken notice thereof in *my Thoughts about Natural Philosophy*. The same also is found in all Plants and Vegetables, which do all grow and propagate themselves by their Juice or Water; for as their Moisture diminisheth or fades, they wither and die.

die. And if we search into the Nutriment of Man, we shall find that the Meat he eats, must be changed into a fluid Water, to the end that being afterwards turned into Blood, and other necessary Juices or Liquors, it may readily circulate and pass through the whole Body and renovate the same.

§ 19. And for as much as the Food we eat must nourish and maintain the very least parts of the Body, which in form and efficiency are greatly differing from each other ; therefore it follows that the same must be changed into a Spiritual water, to the end it may pierce into all and every least part of the Body : Yea what is more our Food must be reduc'd to that high Degree of Spirituality, as to be a fit Nutriment for our Thoughts ; for when a Man is hungry, he shall find that his Thoughts are not so free and copious, as when he is refresh'd by due and temperate eating ; whence we may with great Evidence conclude,

clude, that the Food wherewith we are nourished must be changed into such a spiritual Essence, as is that out of which our Thoughts and Ideas are formed ; because we find that by too earnest Cogitations, the strength of the Stomach is oftentimes so far diminished, that it can no longer digest the Food it hath received, and by this defect of digestion in the Stomach, we are made unfit and unable for much thinking or studying. Now if so be our Thoughts were not fed and maintained from the Food we eat, neither would the want or indigestion of it, be the cause of the diminishing or weakening of our Thoughts, as may be evidently perceiv'd in those who are sick, and eat little or nothing, as well as in others, who overburthen themselves with Meat and Drink. And indeed, *if so be our Thoughts or Images were not formed out of the watery Essence, by our fiery Spirit,* it must follow that a Man might think or meditate without receiving Food convenient for him ;
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which being impossible and contrary to all Experience, we may conclude that the Thoughts and Ideas or Images that are in us, do consist of a fiery and watery Essence.

For fuller proof hereof, let us consider, that every one finds by Experience in himself, that after much weeping, he will be unfit to excogitate any thing, or to form any Ideas; and when even any Person doth so far continue his weeping, that it becomes customary and habitual; he shall by this means find himself so utterly devoid of Thoughts, that afterwards he shall no longer be capable of thinking with understanding, or forming any coherent Ideas, but become mopish without concerning himself with, or minding any thing. From which Experiences it follows, that Thoughts or Ideas are formed out of our watery Essence, for if they did not consist of it, how would it be possible for them to be weakened, or even wholly to cease by much weeping? Of which see more § 30. We find

find likewise that those who are troubled with a Cold, have not onely their Senses of Smelling and Tasting much impaired, but moreover are thereby made unfit for much thinking or study ; which is a further proof that the Thoughts owe their Original to Water, and consist of the same, for otherwise they could not be hindered by a Cold, in which Distemper the Water of the Microcosm is turned into Snivel and Fleam, instead of supplying Matter to our Thoughts and Senses: Of which see § 78.

And I leave it to every ones consideration, whether things Spiritual do not stand in need of a spiritual Nutrient ; and seeing that moderate feeding strengthens and enlivens our Thoughts, whether this be not evident proof that our Food must be made spiritual, before it can serve for a fit Aliment to our Thoughts, which are spiritual.

§ 20. And seeing that our Meat becomes changed into a fluid Water, that

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that it may be fit to feed our Bodies according to § 18, and that this Water also must in part be made so spiritual, as to be able to supply and recruit our Thoughts, according to § 19, it follows

See Div. Attrib. p. 178.

that Water (which is the Original of all Creatures, as § 9:) *must be a spiritual Essence*; because nothing can ever be changed into a quite other Essence, than that is, from whence it originally proceeded: And for as much as Bodies may be changed into a spiritual Being, as hath been just now proved of our Food; therefore of necessity their Original, *viz.* the Water must also be spiritual. We shall be further assur'd of this Truth, by considering the Properties of Water, *viz.* that it is devoid of all Figure and other Qualities (for who can tell of what Colour it is, or what other Qualities it hath) also because it is indivisible, into parts differing from the whole the least part of Water, being as much Water as all the rest, neither can it be changed into
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any thing more simple than it self, from whence it proceeded at first, whereas all Creatures may be changed into Water, because they were originally formed thence: So that it appears, that the least drop of Water is possessed of as great Perfection proportionably, as the vastest confluence of it. Now the reason why the Water is destitute of all Figure is, that it might be the fitter to bring forth all manner of Figures and Qualities. From all which it is obvious to make this Inference, that the Water is a spiritual Essence (*viz.* that it hath Affinity and Communion with the Spirit, as *Eve* with *Adam*, the Moon with the Sun, and other such like) because it is without Figure, and cannot be divided into any parts, but what are of the same Nature and Perfection with the whole, and yet by means of the fiery Essence, doth bring forth all Bodies, which are the Subjects of figure and dissimilar Parts.

§ 21. And

§ 21. And as it hath been said of the Nature of the Fire that it is vivifying, except when it breaks forth into too violent an Activity; so on the contrary, the *Water is of a cooling Nature, and cold*; and as the Nature of the fiery Essence is to excite and make alive, as § 12, so the *Water being of a cooling Nature inclines Creatures to rest, or causeth them to die and change, according as the Activity of the watery or lunar Essence, is more or less strong and predominant in them*; even as Fire also when it is become too violently active, doth change the Creatures, and is the Cause of their Death.

§ 22. Now that the watery Essence doth incline the Creatures to Rest, or changeth their manner of working, and is the Cause of Death, whenever its Activity is stronger, than that of their fiery Spirit; we find by Experience in those who are almost drowned in the Water, for they for a time are lock'd up in such a sound Rest, that

that they seem to be dead, and in those also who perish in the Water, as likewise in many other things which die in the Water, and change their former Figure.

§ 23. But notwithstanding these things are known to all by Experience, yet hitherto I could never meet with any, who could give me a satisfactory Answer to these questions: *Why we sleep more in the Night, than in the Day-time? Why sleep doth allay pains? Why mad Dogs, and other Creatures that fear the Water, are for their Cure cast into it? And why laughing and crying are proper and peculiar to Man?*

§ 24. In order to the making out that *the Night causeth sleep and rest, because that in the same, the watery cooling Essence is predominant: We are to consider some things which Nature points us to, and without which it will not be easie for us to apprehend why those things which do*
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more partake of the watery or lunar Essence, than of the fiery, do every one according to their different Efficiency, either cause rest, or mortifie in part; or are else altogether deleterious, so as that they do not onely hinder, and keep back for a time the Activity of the Life, but also wholly change it.

§ 25. It is an evident and incontestible Truth, that the Moon is a watery cooling Essence, because she causeth Cold, and rules over the Waters, as § 10. And because the Moon hath Dominion in the Night, it is a rational Consequence, that the Night or Darkness doth consist of the watery Essence; *for as much as no Creature in the World can have any communion with another, or be ruled by it, except it be partaker of the same Nature.*

Neither can any Philosophers deny (if so be they have ever seriously consider'd the Order of Nature) but that the World, and all the Creatures

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tures in it, consists of these two Principles, and no more; VIZ. Fire and Water, (as hath already been sufficiently demonstrated) and for as much as that Fire of Nature doth warm and vivifie, if we search Nature through and through; we shall find no other Essence that is of a cooling, and rest-procuring Nature, besides the watery Essence, and those things wherein it is predominant.

§ 26. *That the Night procures Rest* (meaning by Rest a state wherein our fiery Life doth more faintly exert its Activity) because the cooling Essence is then predominant, experience also will inform us: For we find that towards Night, we grow more chilly, dull, and heavy, which is caused by the less vigorous Activity of our Life in the Night, than in the Day-time. So likewise we experience, that we are then more apt to yawn, by which Motion we breath forth our Breath, wherein our Strength

See Div. Attrib. p. 178.

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consists, (as shall be made out § 63, &c.) and this in order to the diminishing of it ; that so we may be the more disposed for sleep and rest. We shall also perceive that we are not then so fit for cogitation or study, but that our Thoughts slip away from us; especially if we lead an orderly Life. It is also a thing well worth our noting, that some Persons after that they have watched several Nights together, are apt to have their Legs swell, as if they were fallen into a Dropsie. Which Observations do fully prove this, that the cooling lunar Essence whereof every one of us doth in part consist, is predominant in the Night, which therefore procures rest to us.

§ 27. From what hath been now observed, that the Night, because of the then Predominance of the watery Essence, is a procurer of rest ; we may learn the reason, *why Sleep is an allayer of Pain*. Certain it is, that wheresoever Pain is felt, there the
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Activity of the fiery Life is exorbitant, or excessive ; as shall be shewed § 66.

And seeing sleep or rest is procured by our watery or lunar Essence, it follows that when the same predominates, it puts a stop to the too violent Activity of the Fire, and so consequently doth by means of sleep allay Pain ; sleep being a Consequence or Effect of our Lunar, as Pain is of our fiery Essence.

From the same Fountain-head we may derive the reason, why *Opium* asswages Pain, and procures Sleep. For if we consider whence Poppy hath its original, we shall find, that the red Poppy commonly grows in Corn-fields, and therefore the *Dutch* call them *Wilde koren Rosen*, that is, *Wild Corn Roses* : so that it seems probable, that Poppies are nothing else but Corn that is mortified, by the Predominion of its lunar Essence over its Firery ; for which reason the *Dutch* call them also, *Maan Koppen*, that is, *Moon Noddles*. Now seeing that Poppies

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procure Rest; this proves also that the lunar Essence hath the Predominance in them, for as much as rest is caused by means of the lunar or watery Essence; as § 25, 26. For it is certain, that where any pain is allayed, and rest comes in the place of it, there the Activity of the fiery Life is restrained from excess and exorbitance. Opium therefore reduceth the violent Activity of our Life to rest and quiet, by which means our Strength is preserved, when it is in due proportion administered, and with regard had to the Patient; viz. in cases where the Life is not debilitated in its Operations; for where the Activity of the Life is impaired, so as that it cannot receive and digest the Food or Air to the supply and restoring of our Strength and Faculties; then it is impossible by any Medicines whatsoever, to preserve our Strength, or to recover it.

§ 28. And even as the Fire of all Creatures hath not one and the same Effi-

Efficiency ; so neither is their lunar watery Essence See Div. Attrib. p. 187. endued with the same Activity. Of this Opium is an instance, which being duly administred, only procures rest and sleep ; whereas prepar'd Mercury or Quick-silver, exhibited in a small quantity, destroys a second Life, as Worms, and other Diseases ; whence we may conclude, that all lunar Essences are not endued with the same Efficiency.

§ 29. From what hath been now delivered concerning the Efficiency of the lunar or watery Essence ; we may discover the reason why Creatures that are seized with an Hydrophoby, or aversion from Water ; are cured of that Distemper, by being cast into that Element.

It is without all question, that in this Distemper the fiery Life (which naturally must be united with the Water, that from, and out of the same, it may preserve and maintain the Body) hath an aversion from the Wa-

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ter ; Experience teaching us that Hydrophobous Creatures abhor the Water ; and together with the Abhorrence, their Life is excited into so violent an Activity (signs whereof are their maliciousness in biting every thing they meet with, their continual foaming at the Mouth, &c.) as that thereby they grow mad, and so die, in case they be not timely relieved.

We find also, that no Creature is so much obnoxious to this Distemper, as a Dog ; and it is very well worth our enquiry what may be the reason why this Disease is more incident to Dogs, than other Animals. Anatomy in this case cannot inform us, that the Configuration of the inward parts of a Dog, should make him rather subject to this Disease, than that of other Creatures : Neither will our Anatomical or Corpuscular Philosophers, ever be able to demonstrate ; that the Particles in a Dog are more dispos'd to cause Hydrophoby, than those of other Animals. Wherefore in my Judgment the best way to
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hunt out the reason hereof, is well to consider the qualities that are proper to a Dog: And in this search we shall find, that there is no known Creature so fiery, fierce and vigorous as a Dog is; for which reason the Ancients called the hottest time of the Year, the Dog-days; neither is there any Animal that drinks so frequently, or lets his Tongue hang so much out of his Mouth, nor any thing that fetcheth his Breath so thick and strong as a Dog doth, when he hath run never so little; a Dog's Urine is also salt beyond that of other living Creatures, and other such like: All which qualities taken together evidently demonstrate that the fiery Life of a Dog, is in a continual vigorous and strong Activity, and consequently stands in need of abundance of Liquour or Moisture to moderate the vigorous Activity of his Fire: And therefore whensoever he wants Water, and is tormented with Thirst he grows impatient, and at last conceives an aversion for the Water; by which means

means his Fire becomes inflam'd into such a violent Activity, which renders him so malicious as to bite every thing he meets with; which biting for as much as it participates of the disorder'd fiery Life of the Dog, doth excite the same violent Activity as well in the Fire of Men as of other Creatures, and so transmits the same Disease and kills them, if they be not helped in time.

This Disease therefore being nothing else but a too violent Excitation of the Fire-life, accompanied with an abhorrence from Water, can no other way be relieved, than by putting a stop to this violent Activity, and effacing or mortifying their aversion from Water. And seeing that it is the Nature of Water to cause mortification, as § 21, 22. consequently it mortifies, and effaceth this violent operation of the Fire in Hydrophobous Animals; as hath been prov'd by Experience upon a Dog that was bit by a mad Dog, and by this means became Hydrophobous, who after
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having been several times cast into the Water was cured ; and so likewise Men that were so bitten, have by the same means been recovered.

Neither are Hydrophobous Creatures onely this way cured ; but my Father also in his Writings makes mention of many Fools or distracted Persons, (*viz.* such as by Imagination, Love, Sorrow, or the like, are become foolish, by having excited their Fire into a continual Activity, but not those who are born so) who by chance falling into the Water, and being taken up for dead, and continuing so for some time, upon the thrusting of a Knife-sheath that had the point cut off, into their Fundament, and some blowing through the same, till the Water gush out of the Mouth of the drowned Party, have not onely been restored to Life, (because the Water was not yet come into their Belly, which is the Seat of the Breath of Life) but also to the full use of their understanding, which they had before they were distracted. This
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Method of curing Fools, and distracted Persons, Dr. *Richardson*, according to his own Confession, learnt out of my Father's Writings, and using the same, recovered many. The way he took was this, having stript the Parties naked, he bound their hands upon their backs, and ty'd their Feet to a Rope fastned to a Pulley for to let them down more or less deep into the Water; and then setting them upon a Bench with their Backs towards a great Vessel with Water, he pull'd them up by the Rope which was fastned to their Feet, and so let them fall with their Heads downwards to their Waste into the Water, yet so as that their heads did not touch the bottom of the Vessel, and there left them till he judged that their upper Parts were drowned; It may happen indeed that some through fear, or because they are not strong enough to stand out this Method, may miscarry and die; and therefore it is fitting that permission should be procur'd from the Magistrate for the exercising of this practice,

practice, as it is usual for cutting of the Stone, which is likewise a doubtful Operation, and from whence all do not escape with Life. And for as much as Fools or distracted Persons, by being bereft of their understanding, are of no use in the Commonwealth; whereas those who are troubled with the Stone may notwithstanding that Disease some way or other contribute to the well-being of it, it is more reasonable that this Method should be used towards the former, than the Operation of Lithotomy practised upon the latter. And that the foresaid Doctor did cure several distracted Persons this way, there are many in *Holland* that can verifie:

From what hath been here alledged, it appears very evident, that Water puts a stop to the too violent and exorbitant Operation of the fiery Life, or doth mortifie the same, and alter the Operation of the Idea's that afflict and torment distracted and Hydrophobous Persons. And since these Idea's consist of a fiery and watery Essence,

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Essence, according to § 19. consequently those afflictive Images may these two ways bereave Persons of their understanding; viz. either by stirring up our Fire into an over-strong Activity, which causeth *Raging Madness*, and as hath been said, may in several Cases be cured by casting the Patients into the Water; or else by producing such a Sorrow and Melancholy, as is accompanied with continual weeping, which often causes the Persons so afflicted to become *mopish* or *foolish*, as hath been hinted § 19.

§ 30. These Observations will also point us to the Reason, why *Laughter and Weeping* are proper to *Mankind*; for we find that when for the Death of a Friend, or other Cause, we are seized with extraordinary Sorrow, if we do weep freely, our Sorrow is by this means alleviated, and that the Image of our dead Friend, or the Thoughts of some other suffer'd Losses, will no longer be so strongly present with us. And on the

the contrary, Experience informs us, that Persons over-taken with some great grief or affliction, when they cannot discharge their Sorrow by weeping, do often fall into some Distemper or Sickness, because the Idea of the cause of their Sorrow, by this means encreaseth; and continues still present with them; which natural effect teacheth us, that the Water whence our Tears proceed, serves for support and supply of the Idea's or Images we receive from without, or do form our selves (that our Thoughts or Idea's are formed out of the Water, and by it are preserved in their Efficiency, see § 19.) wherefore whenever any Person breaks forth into Tears, whether the Cause be sorrow or joy, by this means the Idea or Image which was continually active in, and present with him, will wane and decrease in its Activity, and be reduc'd to rest; because that which is the Support of those Images is taken away by weeping. For as all things are debilitated, that is, de-

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crease in their Activity, upon the failure of their wonted aliment; so likewise must the Idea's, which are continually operative in us, change this their Activity, when ever we take away their aliment, and suffer it to run away in Tears. And accordingly we shall experience, that after having wept abundantly, we shall find our selves indisposed for the forming of any perfect Thoughts or Images.

In like manner when any one laughs till the Tears break forth, he shall find himself afterwards less powerfully moved with the pleasantness of the object that caus'd his Laughter; because through laughter, the Images are weakned in their over great Activity: And the old Proverb, that *a Fool is known by much Laughter*, contains a certain Truth; because continual laughing changes the Images or Thoughts we frame, and therefore they that laugh much, cannot excogitate any matter fully, and consequently can never attain to a good Understanding. It

It is also well worth our Enquiry, whether it be not for this reason, that the *Jewish* Women six weeks after their Delivery, are according to their Custom baptized, and that in such a manner, as that the Water covers their Head and whole Body, without leaving the least hair of their Head above the Water; *viz.* to the End that the former Image, they have been enamour'd of might die, and they thereby be disposed for receiving another or better Image, at their Impregnation. And for as much as Water is in its own Nature deleterious to Images, it is worth our serious consideration, whether this doth not prove Baptism to be natural, and of a natural Efficiency:

§ 31. Having proved that all things consist of a fiery, and of an aqueous or lunar Essence; we will proceed to answer an objection; *viz.* that these two Essences are contrary to one another, and consequently cannot unite

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See Div. Ar-
rib. p. 191.

together in order to the producing of one Birth. Which objection may be easily solved by distinguishing betwixt a Fire that continues within the Bounds of its natural Activity, and that which is pass'd over into a violent and preter-natural Operation, of both which Fires, see § 14. As for the natural Fire, the same very readily unites with the aqueous Essence; for we find in our selves, that our Heat and Cold are so united in us, as that from their Union, a mild and temperate Warmth doth arise. And the same is found in all Vegetables and Animals, whose growth depends upon the Union of Fire and Water.

As for artificial or culinary Fire, the same at first-sight seems to be contrary to Water; but when we consider, that in time the Fire unites with the Water, so that the Water becomes heated by it: We shall be convinced that the Fire then onely seems contrary to the Water, when its Operation is too violent: Thus we find that a Person seized with an
Ague

MAN, and his Diseases. 51

Ague, is sometimes hot, and at other times cold, which Ague continues with him as long as his Fire is too violently active, but as soon as his Fire ceaseth from this too violent and preter-natural Operation, he is no longer sensible of Heat or Cold, but onely of a gentle Warmth: from which plain and certain Observation we may safely conclude, that the Fire is not contrary to the Water, save onely when its Efficiency is too violent and preter-natural.

§ 32. But it may be further objected, that seeing according to our position § 21, the natural Fire is vivifying or productive of Life, and the watery Essence mortifying or destructive of it, that consequently they can never concur to the generation of one and the same Birth; because the one would destroy what the other quickens, and therefore that no Birth can proceed from them.

Moreover, because it hath been said § 25, that nothing can participate

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with another, or be govern'd by it, except it partake of the same Nature; we may very well conclude, that the Fire can have no communion with the Water, or be united therewith, because their Operations are altogether different.

As to the first of these Objections, we are to take notice, that the the order of Nature is, for *all things to be produc'd by Unity*, that is, that one thing must have the Dominion over all those that are under it; for if all things should bear sway, and not comply with, and be subordinated to the Operation of another, the consequence of this would be, that nothing would ever be wrought out to perfection, but all things would run into disorder and confusion, without any form, figure, or distinction. And accordingly we find, that the fiery Essence is generally stronger in its Activity than the aqueous, and hath dominion over it, in order to the producing of a Birth out of it: Thus we

See Div. At-
trib. p. 84.

we see that the Sun is much more powerfull in its Operation than the Moon, and our fiery Life, stronger than our watery Essence, for otherwise it were impossible for us to live so many Years as we do, if the fiery Essence, as the Male, did not bear sway over the watery Essence, as his Wife or Female: For when the Operation of the Fire decreaseth, and as it were resteth; then the watery Essence becomes predominant, and causeth Death.

As to the second Objection; sure it is, that nothing can have communion with another, unless it be partaker of the same Nature; and seeing that the watery Essence, hath a quite different Operation from that of the fiery, therefore they do not seem capable of being united. But for the removing of this Difficulty, we are to consider, that although two Beings may altogether differ in Operation, yet this doth not hinder their having communion together, as hath been shewed § 31; and that the a-

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queous Essence doth partake of the Fire, the Moon may convince us, who receives her light from the Sun. Moreover, if the Water were not partaker of the Nature of Fire, there could never any combustible matter be found in it, the Fishes in the Sea would never afford any Fat, or Oil, because they consist out of, and by the Water. Whence we may conclude, that the Fire not onely hath communion with the Water, but is also partaker of its Nature, even as a Woman is partaker of the Nature of Man, because she was taken out of him.

Moreover, when we say that Fire and Water are wholly contrary to each other, we are not to understand it so, as if they could not be united together, for that is found false by manifold Experience; but onely that they are contrary in Operation, so that the fiery Essence quickens, and the Aqueous mortifies. Now when we say, that such a thing *doth mortifie or cause Death, this imports nothing else,*

else, but that it hinders the Life from performing its usual Operation, by which means the Body is either one-ly brought to rest, which happens at Night in sleep; or when the Life by a longer or shorter Cessation of its wonted Activity, reduceth the Body to a more profound rest; and whenever the Life altogether ceaseth from its former Operation, then the Body can no longer continue, or be preserved in its present State, but must be chang'd as to its outward form and figure, (not that the Body is annihilated, that being utterly impossible; because it did not originally proceed out of nothing, as may be seen § 5, 6, 7, but that the Body returns to that, whence it was formed at first; or else the Life for a time, (being as the Light hidden in the Darknesh) doth not work at all, viz. so as to bring forth Fruit, by which means the same either changeth its Operation, or afterwards brings forth better Fruits, which is a thing well-known to Gardeners, that the more frequently they graft a Tree, or trans-

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plant Herbs, the more it conduceth to their Melioration. *So that Death or Dying, to speak properly, is not contrary to Life, but a mean serving for the meliorating of it.* And accordingly there is nothing in the World that can be meliorated or advanced without manifold dying; but of this we shall elsewhere have occasion to treat more fully.

§ 33. And though all Creatures proceed from one and the same Father and Mother, that is from the vivifying fiery Spirit, and the Water; yet we are to take notice, that the fiery Spirit hath many Spirits under its Dominion, which greatly differ from one another in their Efficiency or Operation; many whereof have again their particular Dominion over others, like as in an Army, the *Generalissimo* commands the whole Army; but besides, this every Regiment, Company, &c. have their own Commanders, and subaltern Officers; answerable

See Div. Attrib. p. 164.

swerable to which, considering the World, and all its several parts, we shall find that the same subsists by means of the Universal Spirit, which again hath many other Spirits under it, which have command over others: As we find that every Star hath its own proper Operation, and yet all of them with regard to the Universe, do work in Harmony and sweet Agreement together. The Jews were very well acquainted with this Government or Subordination that is amongst Spirits; and therefore said of our Saviour, *Matth. 9. 34. He casts out Devils by the Prince of Devils*; so likewise *Cb. 12. 24* where our Saviour doth not contradict them in their asserting, that the Devils had a Prince, but confirms this their Sentiment by ascribing a Kingdom to the Devil. Moreover, that Spirits have their Rulers is plainly signified to us, *Ephes. 2. 2. Ch. 6. 12. 1 Thess. 4. 16. Jud. 9. Rev. 12. 7, &c.* The same may also be evidenced from Experience, for seeing that so many different

rent Figures of Bodies are continually generated, it must follow, that the Life or Spirits of these different Bodies, are different also in their Operations, as not being endued with the same Power; for if all of them were of the self-same Force or Power, they would produce the same Bodies. But the fullest assurance that we can have of this Truth, is from our selves, when we consider of how many various Parts and Operations our Body consists, which different Parts must have their different Spirits; though all of them under the Government and Superintendence of our Central Spirit.

Furthermore, if so be every Creature had not received its proper Life, or Fire from God in the Creation, differing from those of others in Operation, and always continued so, then it would be possible for all Creatures to be united, and become one and the same, and so to continue, which is altogether contrary to daily Experience; which teacheth us that different Vegetables, as well as other things

things can never be so united, as to produce one Birth. And though it sometimes happens that Monsters are generated, that is, Creatures born of two different Natures; yet it is very observable, that these cannot proceed to procreate their like; for Experience teacheth us, that most Monsters die, without being able to generate one Birth. For as much therefore as no two different Natures can be so united, as to continue afterwards in the Production of their like; we may with great evidence conclude from hence, that each kind of Creatures have their own proper Life, different from all others in its Efficiency, and so continues for ever.

Besides, if so be all sorts of Creatures could be so united together, as to continue always to procreate their like in the same Union; by this means many quite different Creatures from those that were created at first, would be produced, whereby the Order which God in the Beginning establish'd in Nature would be wholly changed,

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changed, and all sorts of Creatures would be so chopt and changed together, that no sorts of Creatures would any longer be distinguishable from others, which confusion is altogether inconsistent with the Nature of the most perfect Being, who bringing forth all things most wisely and orderly, cannot suffer different Natures to become united to that Degree, as to continue so for ever, and propagate themselves. Moreover, because it is contrary to the Order of Nature, that two things of a different Nature should be united; therefore it is that God expressly forbids the *suffering Cattel to gender with a divers kind, and the sowing of Fields with different Seeds, &c.* *Levit. 19. 19. Deut. 22. 9, 10, 11.*

§ 34. *The Fire now or*
Life by which each Crea-
ture is generated must be a
Spirit (as hath been shewed concerning Fire § 12) for as much as no Body, as a Body can form or generate any thing

See Div. At-
 trib. p. 119.

thing without its Spirit or Life; nay, that no two Bodies can be ever so united together, as to be inseparable.

And seeing that all Seeds or Essences do form themselves a Body suitable to their appointed and determinate Efficiency, and are the Cause of its encrease and growth, and thus extend or display their Activity, according to the greatness or littleness of their Body; it follows that themselves are neither great nor small, and consequently are Spirits, and no Bodies.

§ 35. Experience also teacheth us, that some Seeds of Vegetables, after having been kept several Years, if they be committed to the Earth, do produce nothing; notwithstanding that in outward appearance they differ not at all from Seeds that are but of last Years standing. For as much therefore as these antiquated Seeds in their outward appearance do not differ from others, though the former be

See Div. Astric. p. 148.

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be unfruitfull, and these fruitfull; this may further convince us, that the Essential part of Seeds is a Spirit or Life, which having once left them, the Seeds are no longer prolifick, that is proper to bring forth Fruit.

And I wish I could ever meet with a Philosopher, who denying the Life of Vegetables to be Spirits differing in Operation from each other, should notwithstanding be able to make out to me, how it comes to pass that there are so many Plants, and Herbs, differing in Smell, Taste, Operation and Figure, which all of them have their Original from such small Seeds. Will they say that this difference proceeds from the different Figure of the Seeds? Then I question further, what was it that caused this difference of figure in each Seed? and whether the figure, on outward appearance can produce any thing? Certainly no man of understanding will dare to assert this. But some will say, that this difference of Taste, Smell, and Figure, that is found in Vegetables proceeds

ceeds from the difference of their Pores, as by Example from their being triangular, square, round, oval, &c. and that therefore the Particles that pass through these Pores, must be of the same figure, and that this is the cause why so many different Vegetables are produced. But should we suppose that the pretended insensible Particles, by passing through such Pores, became thus differently figured, how can this variety of figure in the insensible parts of Plants conduce to the difference of Taste, Smell and Operation that is found in them? For this is as consistent an assertion, as if one should maintain that Clay and Dough receive a different Taste, Smell and Vertue, by being put through a small Pipe or Hole that is round, square, three-corner'd, &c. it being most notoriously evident that the Taste, Smell and Operation of things is not changed by any outward Figure. And these that endeavour to explain the alterations of the Blood, by this Hypothesis of the different Figuration of

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of its insensible Particles, will do well to consider what hath been now said; and see how they can disentangle themselves from these Difficulties.

§ 36. And if so be any one will yet proceed further, and deny that the essential part or Essences of Creatures are Spirits, and consequently assert them to be Bodies; I will demand of him, whether all Bodies, as such do not proceed from one and the same Earth; and if so, how their Figures come to be so divers, and various? If any one will here pretend that the different Figures of Bodies proceeds from the greater or lesser quantity of Salt, Earth or Water entring their Composition, or because they consist of the smaller or grosser Particles of these three; then my demand is, what it is that frames these different Particles? and whether they be the Product of the Bodies themselves? If this be asserted, it will follow that any Body or Figure may be produced, only

See Div. Attrib. p. 113.

only by a confused mingling of Bodies, without the assistance of their Life, which doth form the Figures of Bodies. But where is the Artist that can do this? since it is evident that Nature her self doth not change any Body, without the Operation of its Spirit or Life.

§ 37. Moreover, if so be the Life of Vegetables and Plants were corporeal, must it not follow, that they

See Div. Attrib. p. 151.

would all of them have one and the same Figure, because they have their growth out of one and the same Earth? And so likewise that the Beasts, because they use one and the same Food, would have the same Flesh? But we find to the contrary, that they are very different in that regard. Wherefore if we seriously consider this, with the reasons before alledged, we shall find that we may safely conclude from the Premises; *that every Creature must have its own Spirit or Life, by means whereof he*

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converts his Food or Nutriment into his own Nature, and that the said Spirit, or Former, is the Essentiality of that Creature, or Body, wherewith it is united : For as much as the Body must always follow, or comply with the Efficiency of the Spirit or Life.

§ 38. And seeing that all Bodies have their Fire or Spirit, which forms and produceth them, it follows from hence by necessary consequence, *that the Former or Spirit, must have been before the thing formed or generated ; and the same is confirm'd by daily Experience, in that the Seed is always before that which grows from it.*

§ 39. Again, since every Body hath its Seed or Spirit, by which it is formed, it must follow, that *this Former doth also preserve its Body, and renovate the same in all its parts, as long as the formed Body continues in its first Figure ; because otherwise*

See Div. At-
trib. p. 147.

while it would soon perish, and alter its Form; for as much as all Bodies do continually evaporate, and give forth Effluvia's from them.

§ 40. *This Preservation and Renovation cannot be performed any other way, than by means of the Food or Aliment, which every Being takes in: And this Nutrition is done by the Spirit, who so forms and disposeth the Nutriment, that it serves for support of its formed Body.*

§ 41. In like manner from this Conservation and Renovation of Bodies by means of their Spirit; it follows See Div. Astron. p. 12. that the same must get the Food, by means whereof their Form is preserved from without. For if all Creatures were not necessitated for their Support to receive Nourishment from without, it were impossible for them to grow either better or worse, increase or decrease; because otherwise they must be suppos'd to feed themselves,

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selves, and consequently always continue in the same State, and so would be unchangeable, which is competent onely to the Creatour. And this every Man finds by Experience, that he must receive from without the Nourishment, whereby his Body, and its Operations are maintained.

And although the hardest and most lasting Stones and Metals do not seem to stand in need of any support by Food; nevertheless, if we will give ear to reason, it will teach us the contrary: For we find that Metals have not always had the same Essence, but must have had some Principle from whence they proceeded at first; neither do they always preserve the self-same Essence, but die and turn to Earth, Vegetables, &c. (whereof see more in my *Cogitations. Physiological*) for as much therefore as they do not always continue in the same Form; it follows that they must receive their Food from abroad, in order to continue the same; for whenever this Food fails them,

them, their Form must of necessity be changed also.

§ 42. And since every Creature receives its Nourishment from without, whereby it is maintained in its form and figure, a consequent hereof, is that *every Creature doth also give forth its Essence from it self*. For if each Creature should always keep that which it hath, it would not stand in need of receiving sustenance from without, because sustenance imports want or defect, and where that is, there is required a supply of what is gone away, or is defective.

And although a Man or any living Wight doth not encrease in bulk or weight, yet for all that he stands in need of daily Food; instead of which Nutriment taken in by him, it is necessary that something go forth from him, as is visible in our Nails, Hair and Skin, how the same continually wear away, and others come in the place of them. So likewise we see how the Flesh of sick Persons decrea-

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seth, and how upon their recovery new Flesh comes in the place of it. The same is also seen in broken Bones, which are consolidated again by a certain Moisture proceeding from the substance of the Bone, which hardning into a bony Consistance makes up the Breach. All which Instances are so many proofs, that the whole Man is renewed continually.

§ 43. For as much therefore as no Body can subsist without Spirits, and that Man continually sends forth his own Image; it must follow *that at the same time he must send forth Spirits also, as well as he receives, together with the Air he draws in, and the Food he eats the Spirits of them both.* And seeing that the Essentiality of every thing, *viz.* that which constitutes the Essence and formeth the Figure of them, are Spirits as § 37, it follows that not onely every Creature, but every Part and Member of them, send forth their spiritual Image or Essence, which daily Experience con-

confirms; for we take in an Image from all the Creatures we behold, which Image is of the same bigness with the Creature we see, and yet it takes up no room in us; for every Man hath infinite Images of the Creatures he hath seen in his Head, many of which Images proceed from Objects greater than Man himself is, and yet he conceives and comprehends them all, according to the bigness of the Objects whence they proceed.

§ 44. These Images now which we have of so many several things must needs be something, for they cannot be

See Div. Attrib. P. 159.

meer nothings; though some for want of due Consideration would suppose them so. For if these Images we have of things, be not essential, but a meer nothing, which have no other existence, but what they have in the Imagination; then what is the reason that we cannot form these Images, without the presence of the Object, or having seen something like it? Or if it

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be so that these Images are nothing, why cannot every one form to himself the Images of things that are not in the World? Now since no body can form to himself any such Image, nor of things that he hath never seen; it follows that the Objects themselves must awake their Images in us, and every Object excites such an Image in us, as it self is. True it is, that when we have once seen a Horse, Tiger, Lion, &c. we have an Image of them, and when we hear any relation concerning any one of these Creatures, we call to mind the Image we have formerly taken in by the sight of any one of them, but we can never have the Image of the very Beast that is spoken of, if we never saw that very Beast it self, though we may have such a like Image, because we have seen such a like thing. This is of such absolute certainty, that he who doth but consider it a little, will be assur'd of the Truth of it, and find it so in himself. And seeing that no Man can receive an Image elsewhere, than from
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having seen the thing it self; it un-
 answerably follows, that it is *the thing*
it self, that must propagate or produce
this Image in him. And for as much
 as this Image doth represent the Es-
 sence of the thing, whose Image it is,
 it cannot proceed elsewhere than from
 the thing it self; because nothing can
 produce the Image of any Object,
 besides the Object it self. Thus for
 instance we find that a Horse, doth
 not give us the Image of an Oxe, or
 a Man the Image of an Ass, &c. If
 any one pretend that this happens by
 means of the Air, which causeth such
 an Image in us; I would demand of
 him why the Air at such a time pre-
 sents such an Image to us, and pre-
 sently after another as soon as other
 Creatures are objected to our sight.
 So that let a Man turn it which way
 soever he pleases, yet will he be for-
 ced to confess at last, that we can
 have no Image, without having seen
 the thing whose Image it is. And
 this is the reason why when a Man
 hath seen his Image in a Looking-
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glass, the same presently slips out of his Memory, because it is the property of all things to reach forth their Images to others, and not to receive them themselves. Wherefore also when any Man out of an affection to his own Beauty, doth forceably endeavour to retain his own Image, it produces Distempers and Sickness in him, as shall be shewed § 98.

§ 45. For as much therefore as all Creatures give forth Images, and that the Images we receive from without take up no place, and yet are not a meer Nothing ; it follows that *these Images must either be Corporeal or Spiritual*, for no third can be admitted. Corporeal they cannot be, because they take up no room in us, and consequently they must be spiritual, representing in our Thoughts that form or figure, which they have wrought or formed in bodily Matter.

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And how shall we be able to understand the reason, why Persons that have never seen one another before, at the first-sight of each other have a mutual aversion or affection produc'd in them, except it be that the Spirits which some Persons give forth do agree with some, and disagree with others.

Furthermore since it hath been shewed § 9, that all Bodies derive their Original from the Water, and that the Water is a spiritual Essence, according to § 20, and consequently that all Bodies were at first spiritual in their Original, and therefore may be changed again into a spiritual Essence, as may be seen § 19, and 43, 44, 45; we are next to consider, what Truth there is in the common definition that is given us of a Body, *viz.* that *a Body is a thing extended in Height, Length and Breadth, or a thing of a determinate Extension.* When ever we go about to define any thing, we must take care that the Definition do include something that
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is essential, and proper onely to the the thing defined, that is, it must be such as cannot be separated from it, for otherwise it is no true Definition, as containing onely Qualities that are accidental to the thing described. As for instance any thing that is soft, or pliable as Wax, Dough, &c. may be shap'd or form'd into all sorts of Figures; yet this Shape or Figure be it round, square, or otherwise, cannot be said to be of the Nature or Essence of the Dough, but onely an accident. Now as to the foresaid Definition of a Body, it is evident, that the same doth not contain what is essential to it, but accidental onely, and which may be present with it, or separated from it. For seeing that all Bodies do continually receive from without, and again give forth their spiritual Essence, according to § 42, 43, and that this Essence they give forth, is no longer contained in any definite Space, as we imagine all Bodies are; because the said spiritual Essence doth in us represent the self-

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same Magnitude, as belongs to the Body whence it did proceed, without taking up any Space in us, as was shewed § 45. Wherefore extension in Height, Breadth, and Length, cannot be said to be essential to a Body, because it may be separated from it, in as much as Bodies are liable to be changed into a spiritual Essence, according to § 19, and 43, 44, 45, which takes up no place, and accordingly three-fold Dimension or Locality, is only an Accident, and not an Essential property of Bodies.

Besides, when we say that a Body is of such a Dimension in Height, Length, and Breadth, this is no more than a Limitation made in our Thoughts to distinguish one Body from another: For to speak properly, there is no Separation or Division of Bodies, with respect had to the Universe, but all Bodies are so united together, that it is impossible indeed and in truth, to separate one Body from another; because the whole World being one Creature, no part
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of it can be so separated from the other, as that it should be no more in the World; even as all things, that is, all particular Bodies proceeded from one and the same Principle the Water, and can be resolv'd again into the same, as hath already been shew'd.

If any one therefore should demand of us, what properly a Body is, we say, that *a Body is a tangible Birth of the Water, differing in shape and quality, according to the Power or Activity of its Former or Life.* Wherefore, he that endeavours to understand the difference of Bodies, from their different insensible Particles, shall never be able to attain to a true Knowledge of their difference, (as hath also been shew'd § 35, 36,) thus for instance, no Man shall ever be able to shew me the difference there is between the Flesh of Beasts, and Fish, and other such like from the different Figure of their insensible Parts. And therefore, *there is nothing that can be more certainly known*
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in Nature, than the Difference of the several Lives that are in it, as being distinguishable by their different Efficiency or Operations, or by the different Shape or Form they give to the Bodies of which they are the Formers. And because Men in their Enquiries have wandred from the right Path of investigating Truth; therefore we find that so many uncertain and differing Principles, have been started in Natural Philosophy, which do not in the least comport with the Nature of things.

§ 46. And for as much as, according to § 33, all Spirits are not endued with the same Perfection or Activity, it follows, that *neither do all Creatures possess equal Perfections; Whereof the great Diversity of Animals, &c. doth abundantly assure us. And seeing that Man enjoys more Perfections than any other Creature, therefore of right he may be look'd upon as the Chiefest of them all; for which reason also, God gave him*
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-Dominion over all Creatures, and the whole Earth, Gen. i. 26.

§ 47. Man therefore being the most glorious of all Creatures, and having Dominion over the same, it follows, that by reason of these his greater Perfections, he is nearer to God than all other Creatures; wherefore, Acts 17. 29. he is called *God's Off-spring*. And these greater Perfections are in the Scripture stiled, *the Image and Likeness of God*, Gen. i. 26.

§ 48. Now though many of these Perfections, that is much of the Image of God, hath been obscured by Sin; yet is there so much of it left, as to enable us to search out wherein this Image did consist.

He that makes it his business to investigate and search out the Nature of things, considering the same all manner of ways, and in all their parts, shall frequently perceive, that after all his reiterated Cogitations and Studies, the things themselves he is
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in quest of shall, without any reasoning, or further toiling himself, all on a suddain be opened to him: And if he enquire whence this Clearness of Discovery proceeds, shall sometimes perceive that the same proceeds from his Heart, or the midst of his Body, which many have found by Experience. And this Knowledge which proceeds from the Heart is so full and clear, that there is no doubting of its certainty; and they who have had experience of it must confess, that it appeared to them as a most clear Light. The Sctipture also intimates no less to us, by making use of these following Expressions; *Having their understanding darkned, because of the hardness of their heart, till the Morning Star arise in your hearts, if the light that is in you be darkness, having the eyes of your understanding en-lightned*, and other such like; all which Expressions plainly inform us, that true Knowledge and Understanding, do as a Light proceed from the Heart, when the same is not harden-

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ed, and that the Image of God consists in this bright Light of the Heart; we are informed, *Ephes. 4. 23. And be renewed in the Spirit of your Mind. And that ye put on the new Man, which after God is created in Righteousness, and true Holiness.* Now this Spirit of the Mind cannot be renewed, except the Heart be deliver'd from its hardness, as appears, *Verse 18.*

§ 49. Conclude we therefore, that *the Spirit of the Mind, or the Image of God consists in this, that a Man hath an inward Light or Understanding:* Which Light being darkned by Sin, Man, as long as he cleaves to that which is bodily, must receive all his Knowledge from without with great Labour, and wearisome Thoughts. And I leave it to all to consider, whether he that advances in spiritual things, that is, becomes more spiritual, doth not find this inward Light more and more cleared up in himself? Sure I am, that all those who have had a Fore-taste of this, cannot

not deny what here is propounded.

Furthermore, that the Image of God, according to which Man is created, consists in this inward illuminating Understanding, may be perceived in *Adam*, in that he knew how to give to all Creatures their true Names, *Gen. 2. 19, 20.* For if *Adam* had not had an Image, or inward Knowledge of the Nature of each Animal, it would have been impossible for him, to give every one of them their right Appellations, onely by beholding their outward Shape.

What Wisdom, or Understanding shall we be able to find in these Words, *Gen. 3. 7. And the eyes of them both were opened, and they knew that they were naked;* if we do not consider, that Man in his Innocency, did perceive and understand all things by means of an inward Light; shall we not be ready to conclude from these Words, that *Adam* must have been created blind, because he had no sight to perceive himself to be naked, and by sinning

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his Blindness was removed, and his Eyes opened to see that he was so. Though this be directly contradictory to that place of Scripture, which tells us, that *God had created all things good*. Wherefore, what other confisting meaning can we put upon these Words, but this, that whereas *Adam* in his Innocency had an inward illuminating Knowledge of all things, the said Knowledge by sin became obscured in him; so that now the Images of all things must be conveyed to Man, from without through the Senses, which Knowledge at the best is very dark, as all Men can witness from sad Experience? And what else doth that Expression, *Gen. 3. 8.* hint to us, *viz.* that *Adam and his Wife hid themselves from the Presence of the Lord God, amongst the Trees of the Garden*; but this, that *Adam* for support of his Body, having eaten of the Herbs and Trees, which being changed into his Flesh, his Body did consist of the said Herbs and Trees; and accordingly,

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Dent. 20. 19. the Hebrew Text assures us, that *Man is the Tree of the Field.* *Adam* therefore having obscured this inward Light in himself, was fain to hide himself amongst the Trees, that is, to subject himself to that which is bodily (for seeing that he consisted onely of these two, Flesh and Spirit, the spiritual Part being obscured in him, he must needs become bodily and carnal) wherefore *Adam's* hiding of himself amongst the Trees, imports onely his being become carnal, and subject to the Body; by which means the Image of God in him, viz. the inward Light, became hid and darkened.

§ 50. But to make a further Enquiry into the Operations and Qualities that are in Man, in the State wherein he now is; we are to take notice, that all Creatures consist of their own determinate fiery and watery Essence, of which see § 8, 9, &c. and that all Creatures have their own Spirit, or living Fire; by means

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whereof they differ in their Shapes and Operations from other Creatures, as may be seen § 33. 37, &c. and seeing that each Body consists of so many Members, which in Figure and Operation differ from one another; by consequence every Member must be gifted with its proper Life or Spirits, which Spirits perform nothing else, but their determinate Operations.

§ 51. And notwithstanding, that Man's Body consists of

See Div. Attrib. p. 167.

many different Members, which disagree in Figure and Operation; yet we find that all the said Members do co-operate together in Concord and Harmony. Whence we may conclude, that all the Spirits that are within the same Body, are governed by one Central Spirit, which enjoins them to perform their appointed Operations, after the same manner as a General commands his whole Army, whereof see § 33. And this we find verified

fied in our selves, that all our Spirits are governed by one. As by Example, when I have a mind to go, speak, or look about me, I find that my Will which proceeds from my Heart, and is wrought out in my Head, causeth the Spirits that are in the Members, to put them into such a Motion, as is answerable to the Will and Command of my Principal or Ruling Spirit.

§ 52. And besides, that every Member hath its determined Operation, we shall also find, that *there is a greater Communion and Agreement betwixt these Spirits that have the same Operation, though they be in different Bodies, than betwixt the Spirits of other Members in the same Body.* Thus for instance, one that hath sore Eyes, shall infect the Eye of another that looks upon him, but not his Ear or Finger. And what is the reason, why we salute or welcome a Person by taking him by the Hand, or kissing him, rather than by reaching forth any other

part of our Body, if our Members are not endued with different Spirits; whereof some are more noble than others?

§ 53. Now that every Member hath its own Life or Spirits, that perform their appointed Operations, is evident in the five Senses; for sight belongs to the Eyes, smelling to the Nose, hearing to the Ears, tasting to the Mouth, and feeling to all the Members; though chiefly to the Brain.

§ 54. For as much as there is no body, which is not formed or brought forth by its fiery Spirit, as § 34, and 37, and that every Member hath its Spirits, which work in it, according to § 50, 51; it follows, that every external Sense, hath its internal, which receives the Images that enter in by the outward Senses.

§ 55. These Senses, since they have every one of them different appropriated

priated Members or Organs, and of various Figures; it is proper and fitting that speaking of each Sense in particular, we should take notice of *the Qualities and Conformation of the several Members, wherein each Sense exerciseth its Operation.* And for as much as the Sense of smelling is placed in the Nose, which part supplies the whole Body with the spiritual Food of the Air, and by this means keeps it alive; for which reason it is said, *Gen. 2. 7. that God breathed into his Nostrils the Breath of Life;* it is but reasonable, that we allot this Sense the first place here:

And it is worth our Enquiry, *whether the Nose be not therefore plac'd in the midst of the face,* because it gives life to all the Parts and Senses by the Air it draws in, as on the contrary, we find that when the Breath, through the extinction of its living Fire, fails, the Nose grows cold.

§ 56. Being therefore to speak of the Nose and its Properties; we shall
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in the first place take notice of its outward Shape and Figure, which will inform us of its fitness to smell, and draw in Breath.

§ 57. We find that the Nose, together with its Partition, which separates the Nostrils asunder, is Cartilaginous or Gristly, which Gristle is the Product or Off-spring of a harder Bone ; for whereas the lower Parts of the Nose are flexible, we shall find that the upper Part of it is hard and bony.

§ 58. In like manner Experience teacheth us, *that the Smell passeth through the Gristle*, (by means of the Hairs that are in the Nostrils, whereof see more § 101.) *and that the sense of Smelling is wrought in the said Gristle*. For he that hath taken a Cold finds his Nose to be stopt, and that by reason thereof he cannot smell, and this defect of smelling is caus'd by nothing else, but because the Spirits that are the Efficients of
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that Sense are deviated from their usual and wonted manner of working: For instead of the Sense of smelling, a sort of Snivel or Snot is wrought in the Nose; but as soon as the Cold is gone, and the Spirits return to their orderly Operation, the Snivel ceaseth, and the Sense of smelling is restored.

§ 59. This Snot being a slippery and glewy Substance, resembling *the quaggy Consistence of the White of an Egg*, we may very probably conclude, that it proceeds from the Gristle, which it self doth consist of such a slimy quaggy Substance. And if so be we would give greater heed to Experience, than to ignorant Peoples talk; we should find that Snot or Snivel is continually made in the Nose, even as Tears are made in the Eye, and not above in the Head: And besides there is no Passage large enough from the Head or Brain to the Nose, for the Snot to come down at.

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Moreover we shall observe, that *the more any one blows his Nose, the more he will be forc'd so to do;* and the less he does it, the sooner will the Snot or Snivel cease; because in blowing our Noses, we use force to expel the Snot, which force being a disorderly motion, causeth a greater disorder, in the parts where the Snot is formed: For the Snot being the effect of a disorder, must needs be the more encreased, the more and greater the said disorder is. From whence we may safely and surely draw this consequence, that the Snot is continually excited and wrought in the Nose, and is not gather'd in the Head, as many suppose, and that therefore we must blow our Noses so long, till we have discharged all the Snot that is gather'd in our Head, through our Nose, which are mistaken Thoughts, and very bad means to be rid of a Cold.

And for as much as all Bones do terminate in Gristles, by which extrem parts of the Bones each Member exerts its Efficiency, therefore the

MAN, and his Diseases. 93

the extream part of the Nose is gristly, that by means thereof, the Sense of smelling may be elaborated; concerning Gristle see further, § 95.

§ 60. The reason *why the Nose hath two Nostrils*, may probably be supposed to be this, because nothing is formed or generated, but by means of a male and female Essence, according to § 8, 9. And why may we not conclude that in like manner, the Sense of smelling cannot be perfected, but by the two Nostrils, which as male and female concur to the Production thereof.

Indeed Experience confirms as much; for when either of our Nostrils do not orderly discharge their Operation, whether by reason of a Cold, or other Cause, which we commonly call a stuffing, we experience at the same time that we cannot smell distinctly, or judge of Odours.

§ 61. And because *Judgment is required to the Sense of smelling, to distinguish*

*stinguish one Smell from another; therefore the Nostrils must have some passages to the Brain, because we find that all Judgment is formed in the Head. And they who become seiz'd with the Head-ach, by the Scent of too strong Odours, prove that there must be of necessity a Communication betwixt the Nose and the Brain. Which Truth discovered by Ratiocination and Experience, is further confirmed by the Anatomy or Dissection of dead Bodies, which discovers to us Nerves in the Nose that pass to the Brain, where all the Nerves are united and concentrated, and is therefore called, *Sensorium Commune*, or the Common Sense.*

§ 62. As the Nose hath its passages to the Brain, *so likewise it hath an opening in the Throat* (as every one finds in himself) and through this passage we perceive, *that the Breath which is drawn in through the Nostrils by means of the Belly,* (which in Respiration riseth and falls like a pair of Bel-

Bellows) through the Wind-pipe enters into the Lungs, which being as it were the Stomach of the Air, doth digest it ; so as that by means of the Lungs our Life is made partaker of *the fiery Essence of the Air*, for our support, and the due Concoction of our Meat, by means of this fiery Life of the Air in us, and to impart strength to the Belly, *which is the Seat of the Air*, and to all the other Members of the Body, to keep them alive, and preserve the Circulation of the Blood and Water : For as soon as the Breath is taken away, the Circulation of the Blood ceaseth. Wherefore a moderate Motion of the Body is very good and usefull, because the same furnisheth the Body with continual fresh Air, which helps the Digestion of our Food. And this is the reason why those who sit much, study hard, and use little Exercise of Body, do not draw in so much Breath, as Labourers do, and Country People that work hard ; but on the contrary draw their Breath more slowly, and

and consequently don't digest so much Air, and therefore are less able to digest so much, or such coarse Meat as Labourers do, because they are not furnished with so much of the fiery Essence of the Air, which is the Concoctor of our Food, but on the contrary enjoy the same still less and less, and therefore either eat but little, or else do not well digest it; and for this very reason, because they take in so little of this living fiery Essence of the Air, therefore they frequently fall into tedious and lingering Distempers.

§ 63. *That the Belly is the Seat of our Breath or Air, and that the Breath communicates Life and Strength*, we find by experience in that, after any strong or continued Motion, our Bellies will heave and fall frequently and strongly: And that when we breathe out, or let go our Breath too much, we grow faint; yea, sometimes to that Degree, that we fall down for want of Strength; therefore, he that would

would exert his utmost Strength in the doing of any thing; must keep in his Breath.

§ 64. I have seen also when I was in *Italy*, in Persons who are put upon the Rack, *how great a strength the keeping in their Breath affords them*; for if they keep themselves silent without speaking or crying out, till they break forth into Sweat; they by this means preserve their strength to that degree, as to be able to stand out all the Pains of the Rack without confessing. And this keeping in of the Breath has the same Effect in others that endure any great Pain, as in Women that are in Travel, who the less they cry out, the more they preserve their strength. We find also that Horses, Sheep, &c. that feed on dry Heaths or Commons, where they have little or no Water, and therefore are forc'd to make use of the Water of the Air for their Drink, are much more strong and healthy than those that drink much Water, because the

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living fiery Essence of the Air, is more copiously received of their Life, and consequently affords them more strength, than those Animals receive who drink much Water. For the same reason it is, that those Persons who drink but little, are stronger than those who drink much, their Urine being also of a stronger Scent, and salter, and will be more free from the Stone and Gravel, except they be born with them ; because they take in, and enjoy more of that fiery living Essence of the Air, which is the Cause of that fiery substance found in their Urine, (of which see § 9) which hinders the production of the Stone and Gravel, and for the same reason it is very good for those that are troubled with the Stone to drink but little.

§ 65. *Now that there is such a fiery living Essence in the Air ;*

See Div. At-
trib. p. 162.

this doth necessarily follow from § 9, viz. because all things in the World consist of

of a fiery and watery Essence. The same is also confirm'd to us from Lightning, which is generated in the Air. Neither indeed can any one deny this manifest Truth; for as much as the fiery Life that is in every one, must be preserved and maintained from the Air; for when ever any one is deprived of the Air, he dies presently; and nothing can be preserved in the State wherein it is, except by that which is of the same Nature with it. Besides those Persons that endure great pain in those parts, where the Breath is first received into the Body in order to its Digestion, as in the Pleurisie, &c. shall experience, that *the more they draw in their Breath, the greater is their pain.* And those who suffer pains in any other part of their Bodies do fetch their Breath short, and do breath out much more than they take in, and this to the end that they might grow weak, and lose their strength. Which Observations being well weighed, will be so many Demonstrations, that the Air

contains in it a fiery Spirit, which imparts force and strength to us. All which Operations of the Air, point us to something very different from what some Physicians would persuade us to be, the main use of the Air, viz. to refrigerate the Heart, which assertion how false it is may be perceived from what hath been here laid down.

§ 66. And for as much as, (according to what hath been now said) those that are in great pain endeavour to send forth their Breath, by this means to diminish their strength; it follows from hence, that Pain is caused *by the too vehement Action of our fiery Life*. For seeing that our strength consists in our fiery Life, according to § 63, 64, &c. we may conclude from hence, that seeing Nature teacheth us to endeavour to diminish our strength, in order to the stilling of our pain, that the Nature of pain must consist in the too vehement Operation of our fiery Life.

Life. Experience also teacheth us, that several Persons who are tormented with great and continual Pains, are hot and burning (as the common Expression is) which signs are an evident Argument, that the fiery Essence must be too active in that case. Moreover, when a sick Person is not sensible of his Sickness, notwithstanding that it encreaseth; this is always a certain sign of the decay of his life and strength, which is also an evident indication that the fiery Life in us, is the cause of feeling and sensibility; and *Pain being nothing else but a too strong sensibility*, it must consequently be an effect of the too vehement Activity of our fiery Life.

§ 67. From what hath been now said, we may easily guess at the reason, *why those who are afflicted with any painful Disease, as the Pleurisie, &c. do exasperate the same by frequent Inspiration*, viz. because there is a fiery Essence in the Air, which serves to support the Activity of our

H 3 fiery

fiery Life, according to § 62. Wherefore, when our Life being strong enough to receive, and entertain the fiery Spirit of the Air, when it is awakened into too vehement an Activity, cannot but by receiving the said fiery Spirit, be made more strong in its Operation, as a Fire which by new fuel added to it, burns more strongly. For this reason it is, that Persons afflicted with a Pleurisie, fetch their Breath thick and short, because they perceive that their Pain becomes exasperated by Inspiration, and therefore they endeavour to relieve themselves by Expiration, which by diminishing their Strength doth allay their Pain.

From this Remark it is obvious to infer of what use the letting of Blood can be in this Disease; for seeing that the opening of a Vein doth nothing else but diminish the Strength of the Patient, and by this means doth sometimes allay the Pain, for which cause some look upon it as a considerable Remedy in many Diseases; not considering

sidering that by this means the life and strength of Man is diminished, and by this means changeth the Distemper into something that is worse. Thus frequent Experience teacheth us that after opening of a Vein, the Pleurisie ceaseth indeed, but an Ulcer cometh in the place of it, which leads the Patient into a Consumption, and consequently doth more mischief than good; so that in this Distemper it is much better to make use of such Medicines which both preserve the Life in its strength and vigour, and remove the Pleurisie.

§ 68. Having shewed § 63, 64, that *the living fiery Essence of the Air*, doth impart strength and vigour, it follows that the same *must also feed us*; because nothing can strengthen us, except it be taken in by our Life, and be united to us, according to § 39, 40; now there is nothing that strengthens us, by being united to us besides our Food. This Experience also teacheth us, for the hotter any

Country is, the less Meat sufficeth the Inhabitants thereof, and those who have us'd themselves not to drink at all, and to eat little, shall discharge Urine more copiously after their Meals, and yet preserve their strength, which is a plain Indication, that such as these are fed by the Air, and strengthened by it, as serving them instead of Drink: Of which see more § 64.

§ 69. These Remarks about Respiration being well weighed and consider'd, will make way for us to discover the Causes of the *Tympany* or *Wind-dräpsie*. It hath been found by Experience, that Persons afflicted with a Tympany, whose Belly is extended as a Drum with Wind, when an aperture hath been made in their Bellies to let out the supposed lodging Water, (which Operation is commonly call'd a *Paracentesis*) instead of Water, nothing but Air hath come forth, upon the Eruption whereof, the Patient hath died immediately; which

which shews that even in that superfluous Air there is found a living Essence, by means whereof our Life is strengthened and fed, as hath been shewed, § 64, 65.

§ 70. The Cause of the Tympany, which is nothing else but Wind or Air, shut up in the Belly) is the Aberration of our Life, from its wonted Operation; whether by reason of some fright or strong apprehension, whereby it is hindered from performing its due and wonted Operation, viz. when our Life being weakned by the said fright or apprehension, cannot duely take in the fiery Essence of the Air, or distribute the same throughout the whole Body, by which means the Air that is taken in, continuing for the most part in the place of its common Residence, the Belly, as was shewed § 63, the Belly must needs become more and more distended by the accession of new Air, as a Bladder becomes more and more distended, as more Air or Wind is blown into

to it. And for as much as Experience informs us, that Wind on the Earth is produced through the Motion or Operation of Air upon the Water, (as hath been demonstrated by me in my Physiological Cogitations) this may inform us, that the Tympany may proceed from our Water, as well as the Dropfie.

§ 71. And this Air is not onely in the Guts, but also without them, for all parts of the Body must be fed with Air, and therefore its presence is required to every one of them, in order to their support and efficiency. Now *that the Air is not onely in the Guts, but without them also*, may several ways be demonstrated; as by the Breath which proceeds out of our Mouths, which comes out of our Belly; and by Wounds in the Belly, which though they do not touch the Guts, yet we shall find Breath or Wind to puff out through them, besides other Instances more.

§ 72: The

§ 72. The same Reasons that discover to us the Cause of the Tympany, will also inform us how the *Drop-sie* is produc'd, because they are of kin together, as hath been shewed, § 70. That there is a Water which circulates through our Bodies is a thing unquestionable, which Water is of absolute necessity to all parts of the Body, as being all of them continually fed, and nourished by the same.

It is certain also, according to § 62, that when our Breath cannot perform its due Operation in our Bodies, then the Water also becomes hindered from absolving its Circulation; and consequently we find that Persons, whose Life hath been driven into great disorders, which may happen several ways, as by acute Pains, long continued Agues and such like; are no longer able duly to digest the Breath or Air they draw in, by which means they in process of time come to lose their strength, and fall into the *Drop-sie*; for as much as the watery Essence gets the Dominion in them, by defect

defect of the fiery living Essence of the Air, which furnisheth them with strength to make the Water circulate, and advance it to its perfect Maturity, in which case the Dropfie may by some fit Remedies be cured. But when the proper Life of Man, that is, his central Life or Spirit, is weakned, and decays in its Activity, so as that it can no more take in the fiery Essence of the Air, then it is impossible by any means whatsoever to overcome the Dropfie.

§ 73. And as the Nose is such a principal Part or Member of the Body, as through which the Breath must be conveyed to our Body; and where the Sense of smelling hath its Residence; so is the Mouth a Member of no less necessity, which chews the Meat for our Nourishment, and is the Instrument of the Relish and Taste we find in it. Now to the End we may discover the Use and Operation of this Member; wee'll enquire of what visible parts it doth consist.

§ 74. We

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§ 74. We know that the Lips and Teeth, which are the Fore-part of the Mouth, are required to the forming of Speech; for those who have their Lips stiff, or slit, as in those who have Hair-lips, and those who have no Teeth, cannot speak so well as others, as is seen in old Persons; and Children also do not learn to speak, till after they have got Teeth. But for as much as the Lips and Teeth alone cannot form the Speech, therefore the Tongue, which naturally forms the Hebrew Letters in the Mouth, (as I have shewed in my Treatise called the *Alphabet of Nature*) doth principally produce Speech with the assistance of the Palate, or Roof of the Mouth; and to the End the Tongue might readily move it self all manner of ways, she is furnish'd with variety of Nerves for that purpose.

§ 75. Now for as much as nothing can be perfected, as we have seen concerning the Sense of smelling, except

cept it be produc'd by Male and Female, or Duality, according to § 60; so neither can our Speech be perfected, but by the assistance of the *Uvula*, which we commonly call the Palate, and is as it were, a little upper Tongue, coming from the Brain, and the *Epiglottis*, or Throat-flap, which covers the Wind-pipe; for when any Distemper happens to the *Epiglottis*, we shall find it an hinderance to us in speaking.

That from the *Epiglottis* proceeds the Beginning of Speech, we may perceive by those that speak in their Belly (and so deceive People; because by this means they counterfeit a Voice, as it were, coming out of the Earth, which answers them, without the least moving of their Mouths, as if a Spirit were discoursing with them) which Speech is formed by the Throat-flap. So that the first Rudiment or Original of Speech is from the Throat-flap, our Palate, or *Uvula* co-operating, which is afterwards brought forth by the Tongue

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Tongue in our Mouth, the Roof of our Mouth, Teeth and Lips assisting.

§ 76. And that our Speech is formed by the *Epiglottis*, the Nature of the Throat-flap will in-

See Div. 4th
trib. p. 15.

form us, as being of a gristly Substance. Now as

the Sense of smelling is formed in the Gristle of the Nose, as § 59 ; so by the *Epiglottis* is our Speech formed, and that quavering Sound that is utter'd in singing ; for as soon as the Gristles of the Throat, whereof the *Epiglottis* is a part deviate from their accustomed Operation, (as it commonly happens when we have taken cold,) so as to feel raw, pricking or tickling, we find our Speech hinder'd, and sometimes quite lost ; and this, because the matter whereof the Voice and Speech is formed, cannot then be perfectly elaborated in the Throat-flap : And this perfect Elaboration or Maturation consists in this, that the first Rudiment of our Voice be formed

med in that place, which being then disorder'd, cannot be done as in those who are troubled with a Cough, or other Diseases of the Throat, which Original or Rudiment of our Speech, is that which properly frames our Voice; must be a spiritual Essence, because we find that the Voice-produce an Image in us, for we may know every one by their Voice; but except we have an Image of such a particular Man's voice, we cannot know who it is that speaks. And since § 43, it hath been made out, that the Images we receive, cannot be meer Nothings, but spiritual Essences, consequently the Voice, which utters its Image into our Ears must be spiritual. I have known a Person who having spoken much and earnestly for some Days together became dumb; that is, suffer'd a total Loss of his Speech; who as soon as a Knot of co-agulated Phlegm did arise from his Throat-flap, which was sweet like 'Wheat-flower, recover'd his Speech again; he experienc'd also during

during the said Loss of his Speech, that the eating of unleavened Bread conduceth to the Recovery of it, but that leavened Bread was prejudicial to him. He found also, that upon his spitting out of the foresaid sweet Phlegm, his Speech again departed from him; and that this peculiar kind of Phlegm wholly left him, upon the full return of his Speech. Which instance sufficiently informs us, that the Original or first Rudiment of the Voice, is the Product of the Gristle of the Throat-flap, because when-ever that is distemper'd, it produceth Phlegm, instead of the Rudiment of a good and clear Voice.

§ 77. Having now spoken of Speech, its Original and the means of its production, and how the same is disturb'd by taking cold, and the Distemper of the Wind-pipe and Throat-flap; we proceed next to enquire what a *Cold* and *Cough* is.

The first Cause of a Cold is, a fright or apprehension arising from the Sense
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of Cold, whereby the Cold which is a lunar and watery Essence, gets the Predominion in us; though it may also proceed from excessive eating, studying, &c. whereby our strength is wasted; so that our Life which before acted regularly, as producing neither too much Heat or Cold, but a moderate Warmth, being over-power'd by the Cold, produceth that which we call a Cold; in like manner as we find that by a strong Apprehension and Imagination a Man may be the Cause of his falling sick and dying. Now that an apprehension or fright is the Cause of Colds, we may perceive in those we call Naturals, who having little or no Understanding, consequently are not apt to be very apprehensive or frightfull, for such seldom or never are troubled with Colds; whereas those who are apprehensive and frightfull, and so more sensible, are much more apt to be seiz'd with this Distemper. So that we may advance this for a general Maxim, that those who are least frightfull, and live
tempe-

temperately, are generally the most healthfull, and rarely subject to any Sickneſs.

§ 78. *That the Cold, which by ſome Apprehenſion or Fright, hath got the Predominion in us, is a female or watery Eſſence*; we may gather from hence, becauſe the Diſtemper we call a Cold, and the Phlegm or Snivel its Companion, is form'd and produc'd in thoſe places that are griſtly, as in part hath been ſhewed, § 59 and 76. It is alſo obſervable, that ſome Perſons upon taking Cold, are ſenſible of Pain in all their Joints: which Joints being nothing elſe but the meeting of two Griſtles, from which Griſtles the Joint-water proceeds, which is of abſolute neceſſity to perform the Motion of the Nerves. And that Griſtles, which are the proper Seat of a Cold, are a female Eſſence, ſhall be ſhewed § 95, when we come to ſpeak of the Bones, and their Original. This Diſtemper therefore, which we call a Cold, being a female or watery Eſſence,

sence, when it gets the Dominion in us, it causeth manifold disorders, and by this means excites various pains and indispositions in our Bodies.

Experience also teacheth us, that at the Beginning of a Cold, we are seized with frequent sneezing, whereby our Life being depriv'd of its strength, is made unable to perform its wonted Operations; and for this reason the Water that is in us, instead of being elaborated to its due perfection or maturity, is turned to Phlegm and Snivel; and because no perfect Smell, Taste, Sight, &c. can be had, except our Water or *Lympha* be thoroughly elaborated, accordingly we find that in a Cold, all the Senses are more or less defective or impeded.

And for as much as this Distemper is elaborated in a Gristle, and that it is a Gristle that furnisheth Seed for Generation, accordingly it is found by Experience, that those who have a Cold are unfit for Generation.

§ 79. Having thus shewed what a Cold is, and the Cause of it, in the next place, it will be proper to *enquire into the Nature of a Cough and its Cause.*

Certain it is, that they who have taken Cold, perceive a tickling or pricking in their Throat, which sensation proceeds from the Distemperature or Crudity of the matter, of which the Voice is formed (according to § 76,) which as such being noisome and troublesome to us, we endeavour to be rid of it, and think to expell it by coughing and spitting; and finding that by this means, we are so far from being rid of our Cold, that the Tickling and Pricking in our Throat becomes thereby encreased, we at last grow impatient, and then with violence resolve to spit out, and expell what thus sorely afflicts us, but all in vain; *for the more we cough and hawk, the more we may;* for as much as by all this, the Life is but the more excited to disorderly Action. Whereas on the contrary, we ought

to endeavour to alleviate and diminish our Cough by little and little, to restrain our coughing as much as possible, and to abstain from much hawking, spitting, and loud speaking, and so by this means bring our Life into repose and quiet again.

When our Life therefore at any time through Impatience, is stirr'd up into a too vehement Action; it often happens, that this produceth a *customary or habitual Cough*, which often continues after that the first Cough, which was caused by the Cold, is gone, from which two last Coughs, *viz.* the *Impatient* and the *Habitual Cough*, often proceed Consumptions, Tislick, and other Distempers; because by continual coughing we void much Phlegmy matter, and the more we void of these, the more our strength is diminished; in as much as this Phlegmy matter (which hath its Original from the Bones, which are the parts wherein our Life is continually operative) is not found in sound and healthy People, but is elaborated

borated for the support, strength, and sustenance of the Body; this Matter therefore when it is continually spit forth, must of necessity weaken the Body in like manner, as those who are too frequent in the use of Women, do thereby waste their strength.

We must therefore well observe this *three-fold Cough*, viz. *the first of which is caused for that the Original or Rudiment of the Voice, hath not attained its full perfection, the second proceeds from Impatience, and the third from Custom and Habit*; that so we may be able exactly to distinguish them from one another upon occasion.

§ 80. As the Tongue, Teeth, and Roof of the Mouth are required for the perfecting and compleating of our Speech, so are they likewise necessary for the chewing of our Meat, with the help of a Water, which from all parts is conveighed into the Mouth, and doth ferment our Meat and quicken it. In like manner as Women in

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America do chew a certain Root, and put it into Water, by which means the Water is put into a Fermentation, which they afterwards make use of for their common Drink. Our meat or food being thus prepar'd in our Mouths, to become our Aliment, the same is swallow'd down through our Gullet into our stomach, where it admits a second Fermentation, and is there concocted and digested to nourish our whole Body, by means of the continual Circulation of our Water and Blood; the remaining excremental part being expell'd by a Wind, which is continually produc'd in the Guts, which Wind divides the Excrements into parts, that they are well digested, as may be seen in the Dung of Horses, Sheep, &c.

§ 81. That the Stomach hath its own proper Ferment, which digests our Meat, and prepares it to be further digested by every Member, for their support, according to § 50, needs no other proof, than what every one finds

finds in himself; for as soon as the Ferment of our stomach is disorder'd, the whole Body is distemper'd with it: More especially we are sensible, that the Operation of the Head, is thereby disturb'd. Now in cases where the Stomach hath lost its strength, that is, when the Operativeness of the Life begins to decay, then no Medicines can help: But if the Ferment, or Life of the Stomach is onely deviated from its wonted Operation (the Life continuing yet in its full strength) and produceth a malignant Acidity, or a putrify'd Bitterness, &c. so as that sometimes our Belches savour of rotten Eggs, or other corrupt preternatural Savours; this I say, may by Remedies be helped and amended.

* § 82. As it hath been said of the Sense of smelling, that two Nostrils are required to compleat the same, so likewise is the Taste performed by the Roof of the Mouth and the Tongue; for when either of these are any ways distem-

distemper'd, we have not our Taste aright.

§ 83. What hath been said concerning the Smell and Taste, the same must also be asserted concerning the Sight, or Sense of seeing, *viz.* that it consists of Male and Female, that is of a fiery and watery Essence: For when a Person that is lively and vigorous rubs his Eyes by Night in the Dark, he may perceive as it were, fiery Sparks to proceed from them: Of which more may be seen § 9. From which Instances it is evident, that there is a living fiery Essence in our Eyes, and when-ever this fails, and the Apple of the Eye becomes enlarged, Blindness follows.

§ 84. And as there is such a fiery living Essence in our Eye-sight, so this Sense consists also of a female watery Essence, which in the Eye is three-fold: The first Water of the Eye is called *Humor Aquens*, or the *Watery Moisture*, which when lost may be restor'd

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stor'd again; for when a Person is so hurt or wounded, as that this Water comes to be spilt, the same after some time may be restor'd, and his Eye perfectly cured. The second Water called *Humour Crystallinus*, or the *Crystalline Humour*, which hath its place in the Eye behind the first Water, is somewhat cloudy and nervous, as may be perceived by suffering the Eye of an Ox or Calf to be frozen, for then by means of a Magnifying-glass, this Moisture is perceiv'd to be nervous or sinewy, so that it seems to be, as it were the Brain of the Eye, in which the Images are received. And behind this second is found a third, called *Humor Vitreus*, or the *Glassy Humour*; either of which latter being hurt, render the Eye defective.

Neither are these three Humours onely required to Vision, but also the Eye-lids, which are furnish'd with a small Gristle, in that part where the Hairs grow, which afford strength to the Sight; and therefore when-ever these

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these Hairs shed by any Accident, the Sight also becomes debilitated.

§ 85. In order to the obtaining of a right Apprehension or Image of the thing that is seen, two Eyes are requisite; for as much as without them both, no due Image can be formed; besides Experience shews, that with one Eye we can onely look strait forwards, and cannot so well discover the Breadth of a place, as we can with both Eyes; therefore one of our Eyes must be active or masculine, and the other passive or feminine, that is, the Right-eye makes an oblique Line, which intersects the Right-line of the Left-eye. For if both the Eyes made two strait Lines, we should see two things at once, but this not being so, consequently both our Eyes must unite in one point; for otherwise it would be impossible for us immediately to measure any distance by our Eyes, if they did not like a rectangular triangle, unite in one Point.

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And like as the outward Sight concentrates in one Point, so the internal Sight becomes united in the Brain, as all the other Senses.

§ 86. As every thing gives out something, and again takes in, or receives, according to § 41, 42, 43; so there is nothing wherein this giving forth, and receiving, is more discernible than in the Eye-sight: For when a Person is strongly look'd upon by another, he shall sometimes be sensible of the Spirits that proceed from the Eyes of him or her that looks upon him. It is by this means that lascivious Women, have power to allure and entice Men, which would be altogether impossible, if they did not send such Spirits or Messengers out of their Eyes, which were capable of communicating their desire or lust to Men.

Now as the Eyes give out their Spirits, so they receive from without the Images, or the Spirits that form those Images from others; which Spirits if they

they over-power ours, and excite a fright or desire in us, we shall find our selves to be affected by them, after the same manner as some People are; who seeing others falling into Fits, or seiz'd with the Falling-sickness, have by the Fright been overtaken with the same Distemper. Neither is there any thing more common and notorious than that Women with Child being affrighted at any thing, do imprint upon the Infant in their Womb, the Image of the Object of their Fright: Whereas if they be not apt to be frighted, the Object will make no impression on the Birth in their Body.

Some Gentlemen abroad are very well acquainted, that the Eyes do receive the Images or Spirits of the things they see, in like manner as hath been now declared; who therefore when they have a mind to have a Colt marked, and shap'd according to their Fancy, get the Picture of a Stone-horse drawn, such as they desire their Colt should be, placing it
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by the side of a River, and then take a Mare that hath never been cover'd by a Stone-horse, and bind her fast on the other side, a Skreen being plac'd between both, the lower part whereof must be even with the ground; so as that the Mare may see the representation of the Stone-horse, which is fastned on the other side of the River, turn'd up-side-down in the Water.

§ 87. As we have shewed that the Smell, Taste and Sight, are formed and consist of two; so in like manner is the Sense of Hearing perfected, or elaborated by both Ears; and therefore when one of our Ears is obstructed, we cannot hear so well as with both. Moreover for the due reception of sounds in our Ears, they are furnished with winding Circles, and with small slender Hairs, which corroborate this Sense, and with a part that is call'd the Drum, wherein is contained a living Essence, which excites the Sense of Hearing, and receives

ceives the Image of it. Which Drum hath several winding passages, consisting of the Gristles which are in the Ears, from which Gristles the Sense of Hearing proceeds, as the Voice doth from the Wind-pipe; for when this Gristle is any way pained, ulcerated, or otherwise distemper'd, our Hearing is more or less thereby obstructed. And therefore it is a very good and proper Remedy for some that have an impediment in their Hearing, to take the Ear-wax of sound and healthy Persons; and having dissolv'd the same in Brandy, to drop it into the Ear, because the Ear-wax is an effect of the Gristle. And because the Image of the Voice is convey'd into the Ears by the Sense of Hearing, and that this Image is the Former of Speech in Children; therefore it is, that *he who is born deaf, is dumb also.*

§ 88. And as every one of the said four Senses, have their peculiar Spirits and Members, so the Fifth, viz. the Sense of Feeling, though it be com-

common to all the Parts of the Body, yet hath it its special Residence in the Brain, whence it is diffused throughout all the Body: For they who have their Necks broke, (which Accident is very frequent in *England*, by reason of their riding on Horse-back with their Toes turn'd outwards; so that when their Horses in galloping chance to stumble, they cannot save themselves, by leaning backwards, because their Saddles are so little, that in this case it is the same, as if they rid without any, and so must pitch upon their Heads, by which means many do break their Necks) are immediately thereupon depriv'd of Speech and Motion, and as to outward appearance are dead; (for the Recovery of whom this method is used, they set their Knees against the shoulders of the Party, and retch out his Head, by which means the Joints of the Neck are set right again, and so recover both their Speech and Senses,) for the clearing of which *Phænomena*, we will en-

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quire into the Nature of the Brain and its passages.

§ 89. When the Brain is view'd in its natural State, with its turnings and windings, it looks like a Knot of Clouds, which at the Forehead divide themselves into two parts, which as Male and Female, do produce and form the Sense of Feeling, and all Images in us; which we may perceive in our selves, for when-ever we are engag'd in any deep Thoughts, we find the operation or working of them in our Forehead; and therefore some when they are studying move their Eye-brows upwards and downwards, like a Pair of Scales, lean their Foreheads upon their Hands, and sometimes contract their Brows into Wrinkles.

§ 90. These two Brains unite in the Hinder-part of the Head, called in Latine *Cerebellum*, and we may call the Hinder-brain, which is the Elaboratour of our Feeling and Images, which

which we have formed in the Fore-part of our Brain, even as the Palate or middle Tongue is the Former of our Speech. This Hinder-brain passeth throughout the whole length of the Back-bone, and is called *Medulla Spinalis*, or the Back-bone Marrow, from whence all the Nerves or Sinews that are beneath our Neck do proceed, and are the Cause of Motion and feeling in all Members of the Body.

That all the Nerves derive their Original from the Pith of the Back; Experience assures us in those that have crooked Backs, so that by the Dislocation of two of the Joints of the Back-bone, the Pith of it is cut off; by which means all the parts that are below the Heart, are deprived of Sense and Motion, and yet continue to live, as Experience teacheth.

§ 91. The Sensations, Images and Thoughts, which we form in the Brain, are no sooner formed or conceived

ceived there; but in a sound Body the Hands or other Members, that are thereto disposed by their Spirits, will immediately set about the laboring of those Images or Thoughts, suitably to their several Nature and Properties, which is an evident Argument that this Elaboration or Actuating of our Thoughts, cannot be performed by any bodily Particles directed to the Hands, to move them in such a manner; because being Bodies, they stand in need of time to arrive at any place, but must be Spirits, whose Motion is instantaneous, and, which as soon as we have conceiv'd a Will, are present at the place ready to move our Members, according to § 34:

And if we heedfully consider, *what that properly is which causeth Feeling or Sensation in us*, we shall find it to be nothing else but our receiving from abroad the spiritual Essences, (see § 42, 43.) of other things, which represent to us the several Qualities those things are endued with, from whence they proceeded. But for as much

much as all our Senses have not one and the same Operation; therefore it is that each Sense onely takes notice of those Operations of the things presented to her, which agree with her own Efficiency, as hath been shewed § 53. Wherefore the Objects of the five Senses, cannot so well be known in their Operations, where any one of the Senses is wanting: And as it hath been shewed concerning the other Senses, that they receive and give forth spiritual Essences or Images; so it is necessary, according to the Order of Nature, that the Sense of Feeling in our Members properly consists in this, That the said Members are disposed and fit to receive the Spirits of other things: For though our Hand touch other Bodies, yet doth not our Feeling, (*viz.* that whereby we judge what kind of Body it is) consist in that outward Contact; because when our Life in these Members either is at rest, or hindred from performing their accustomed Operation, then these Members can-

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not distinguishingly feel the Bodies objected to them. Thus for instance, when our Fingers, or other Members are so stiff-bound, that they are benumb'd, we shall not be able to distinguish what kind a Body it is, that we touch. Wherefore the sense of Feeling doth not consist in our touching of a Body, but in this, that our Members receive or admit the Images which each Body sends forth. Moreover, that the sense of Feeling is not bodily, but spiritual, is a necessary Consequence of this Axiom, that Bodies, as such, cannot form any thing; as § 34---37, but that they themselves must be continually formed by their Spirit or Life, as § 37, 41, and consequently it is impossible for them to excite the sense of Feeling in us, but that on the contrary, their Life must produce in us the Feeling of what it affects or forms.

§ 92. Like as the Images and Thoughts we form in our Brains, move all the Members of our Body,
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suitable to their Will and Desire, and these Idea's and Thoughts are an Effect of our Lives; so to these Thoughts and Idea's do also belong the apprehensions or representations of things, that cause or stir up in us our Passion, as Fear, Sorrow, Joy, excessive Love, Hate, Wrath, &c. For as much as the Images we form, or that we receive from abroad, according to our apprehension of them, do excite in us either Fear, or some other Passion. Thus we find in the time of the Plague, that at the Beginning many more are seized with this Contagion, by reason of the People's frightfulness, because of the strangeness of the thing, than after that it hath continued for some time; for as much as in process of time they become accustomed to it, and are not so apprehensive of it as at the first. In like manner, he that fears he hath eaten too much, and that it will not agree with him, upon this conceit shall not digest his Meat so well, as otherwise he would, and feel himself indisposed

thereupon ; whereas on the contrary, a Fool or Natural, that eats till he can eat no longer, never finds himself indispos'd, because he hath no thought or apprehension whether it will agree with him or not.

In like manner we see that Persons in Love do so powerfully receive the Image of the Person they are in love with, that the same is continually present with them, and makes them unfit to form the Idea's of any other things ; and so by the continual Presence thereof are harass'd and tormented incessantly, and in the end fall sick, and sometimes grow distracted into the Bargain, as § 29, 30. Again we find, others who by the Excess of Joy or Grief die suddainly, or are seized with some Distempers, according to the Activity of the Image or Spirit that excites this Sorrow or Joy in them ; and which apprehension either puts a stop to the Activity of their Life, or else makes the strength and vigour of it to decrease by Degrees ; by which means, lingering Diseases

feases are produc'd, which bring on Death in the end. It happens also, that in some this apprehension is less powerfull, so that the Life is onely brought into some disorder, which apprehension or image will not fail of continuing to produce the same disorder in us, as long as our Life doth not endeavour to rid it self from its Usurpation, and strive to correct the said apprehension or Spirit, by mortifying of it, or dying to it. And the Case is the same in all other Passions, when they have once got the Dominion over us: And our Life can never be deliver'd from this Bondage, but by conquering this over-ruling Spirit, or by putting a stop to the Activity of the Idea, which is perpetually present with us; a proper means for the affecting of which will be, either to endeavour to drown it, or by sleep (which is a participation of Death proceeding from our female or lunar Essence, whose Dominion is in the Night) to efface or mortifie it, (see § 26 and 29.) that
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so our Life may be restor'd to its former State and Order, as it will, in case the Distemper be not become habitual: From all which we draw this Inference, that *the Life is the only Cause of all Diseases*: For he that is not fearfull, nor suffers himself to be over-ruled by his Passions, but with Patience bears whatsoever happens to him, and withall doth moderately exercise his Body, for reasons alledg'd § 62, without over-charging himself with Meat or Drink, shall enjoy health and quiet.

And though sometimes Distempers or Diseases are caused by an indigestion of the Air we draw in, or by over-charging of our Stomachs with Food; yet we shall find upon attentive consideration, that the principal Cause of Diseases, is an apprehension, or strong Imagination, and Fear with the rest of those Passions we stir up in our selves, as in this I hath abundantly been made out, as likewise § 77 and 86.

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Experience also informs us, that when we are seized with Fear, or mov'd with any other Passion, to that Degree, that a sickness or disorder in the Body follows upon it, the Stomach is first disorder'd and out of course: As in the Small-pox, Apoplexy, Plague, or Fits wherein the Breath is taken away, and the Patient like to be choak'd, and other such like: And on the contrary, he that disorders his Stomach either by Meat or Drink, will be apt thereupon to be seiz'd with a Fright of some approaching Distemper. So likewise, he that gets a hurt on his Breast by a Push, Fall, &c. is commonly at the same time surprized with Fear and Trouble; from whence we may draw this Inference, that there is so close a Union between the Life of the Stomach, and our Thoughts, and between them, and our digesting of the Air, that the one is inseparable from the other. Wherefore we may conclude, that he who can rid himself from the Image or Imagination, that hath

hath put him into a Fright, shall soon be deliver'd from his Sickness, if the same by long continuance be not grown habitual, and so super-added as second Sickness to the first, or if the Life it self be not a decaying.

Neither do these reasons and matters of Experience onely sufficiently prove to us, *that our own Life is the Cause of all Diseases*; but the same is also a necessary Consequence from the fore-going Positions. For seeing that our Life is the Former of our Body, as § 34, 35, 36, 37, and continually supports and preserves the same, as § 39; therefore it is impossible for any Spirit to work upon our Bodies, except our Bodies be subject to it, because our Body can do nothing without its Spirit: For if our Body could take in, or receive any thing without its Spirit or Life, then it would be able to work without it, which is impossible; because no Body can subsist without the Life which is its Former, seeing that upon the failing, or change of the working of its Life, it must

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must die, as § 11 and 12. Wherefore nothing can be the Cause of Sicknes in us, save onely our own Life.

§ 93. And for as much as all Meditations, and Images of things are formed in the Head, and that the Sense of Feeling and Motion derive their

See Dis. Attrib. p. 127.

Original from thence; by means whereof the other Members of the Body, are the Effecters or Operators of the said Thoughts or Images, it is worth our pains to enquire whether Generation do not proceed from the same source.

Sure it is, that as nothing is produc'd but by the Union of the male and female Essence, as hath been shewed § 8, 9, so neither can any human Birth be brought forth, but by the Union of a Man and a Woman. And for as much as an Image must be first form'd in our Head, of any thing we undertake, before that our Body can execute or accomplish the same, as § 91, 92, (which incontestab

stable Truth every one may experience in himself;) and since no Body can be formed but by its own Spirit, and produc'd by it, according to § 33---39, it follows, that first a spiritual Union of Man and Woman must precede, before the bodily Birth can be; and because all Images are formed in the Head, accordingly the Wife, through the Love she bears to her Husband, receives the Image he sends forth, and so likewise the Husband the Image of his Wife; which Images as long as they are in the Head or Thoughts, are not elaborated or actuated, that is, they are not united, and brought to a bodily Birth. Therefore it is the proper Work and Function of the Members appointed for Generation, when there is no defect in them (for every Member hath its particular Operation, as § 50, &c.) to elaborate the received Images of those whom we, have a true Love and Desire to unite with, into a bodily Birth in the Womb, even as our Speech is affected by our Tongue,

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Tongue, and our Sight, by our Eyes. But as all things must come to their Perfection, before they can bring forth Fruit; so those Images onely that have attain'd their Perfection, and are truly united together, these onely can bring forth a Birth: For as in all other things, Maturity and Union is required in Order to their Propagation; so likewise where either of these are defective, there can be no human Birth. Concerning the Birth of Man, see our *Physiological Cogitations*.

Now that there is a spiritual Union or masculine Image in the Woman, antecedent to her Impregnation, is demonstrable from hence; because a Woman, that is in love with a Man, and hath received his Image with Desire, though they have to do with another Man, yet shall bring forth a Child resembling the Person she hath been in love with.

The same thing is also found in Beasts; for when the Ewes are rammish, if there be a speckled Ram

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Ram in the Flock, whose Image they have taken in; these Ews, I say, shall bring forth speckled Rams, though the Rams that leapt them were not so. And the case is the same in Horses, as hath been shewed §. 86. So that the Conjunction of Man and Woman doth contribute nothing else to Generation, but that it unites those Images in the Womb, that before were in the Head, in order to the forming of a bodily Birth.

Accordingly our Saviour tells us, *Matth. 5. 28. Whosoever looks upon a Woman, that is, receiving her Image, through his Eyes into himself, so as to lust after her, viz. to elaborate the said Image in conjunction with her to a bodily Birth; for the Greek word, Εμψυχω, properly signifies to effect that which a Man hath in his Thoughts, hath already committed Adultery with her in his Heart, that is, with the Image of her that is in him: For if he had not her Image, it would be impossible for him to commit Adultery with her. So that*
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the Scripture also confirms this Truth to us, that a bodily Birth proceeds originally from that which is spiritual.

§ 94. Moreover that the Birth must first be spiritual, before that the Body can be formed, daily experience doth unanswerably convince us: For a certain Woman big with Child, having taken a Fright by seeing a Person beheaded, falling in Labour brought forth a Child without a Head, neither was the Head to be found. Other Women have by a Fright changed the Birth in their Womb, into the shape of the Object that affrighted them. Now if so be the first Beginning of the Birth were not spiritual, it would be impossible that a Fright or suddain Apprehension, which is something spiritual, should have such a powerfull Effect upon the Bodies of un-born Children: *For nothing can, without outward violence in so short a time destroy the Form of Bodies, so as to deprive it of its former Properties,*

See Div. Attrib. p. 128.

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besides that which formed them at first, and ever since continues still to form them; as hath been proved concerning our own Life § 92. And for as much as the Fruit of the Womb, as long as it is not separate from the Mother, is preserved by the Mother's Life, consequently the Life of the Mother hath Dominion over it; in like manner as after the Birth, the Life of every Creature doth rule and govern its own Body, which Positions will be found true in all their parts, by those who shall take a view of Nature in its whole extent. Now from this Truth, and from what hath been said § 36, &c. it necessarily follows, that the first Beginning of all Births, is spiritual, neither can be any other. And for as much as our modern Philosophers, have their Heads swarming with an infinite variety of insensible little Bodies, (being the Idols they dote upon) without considering that these Particles are all of them formed by Spirits: I here challenge them all from these their Particles,

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cles, to make out the Possibility, how the Fright of the Mother should have such wonderfull Effects upon the Fruit in her Womb.

§ 95. And for as much as all Bodies are formed or made out of the female or lunar Essence, according to § 8, and that *from the Back-bone, all the Bones* See Div. Attrib. p. 174. *are renew'd or restor'd, maintained and fed, and that the Flesh proceeds from the Bones;* as Experience shews us in those, in whom the Flesh is separated from the blackish Bone, for the new Flesh never begins to grow, before that the corrupt part of the Bone be taken away; after which Enfoliation one may plainly see, that the Flesh begins to grow again out of the Bone. From whence it may be gathered, that Children as to their bodily Part, have their Original from the Back-bone, by which the prolifick Spirits or Images, are elaborated in the Members appointed to Generation, concerning which see § 91.

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Neither doth the Scripture onely assure us, Gen. 2. 22. that the Body of Man derives its Original from the Back-bone, as the female Essence, according to § 8, but Experience also assures us, *that the Bones are a female or watery Essence*; for it is known that the Bones give forth a Water, which in process of time becomes glewy and gristly. For when a Bone is broke, the Breach is afterwards made up by a kind of gristly Substance, which is nothing else but the congealing of a Water, that distils out of the broken Bone, and joins the broken Parts together again. And in a word, *all Bones whatsoever, proceed from a Bone-making water*; for all Animals proceed from a watery Beginning or Rudiment (as is evident in oviparous Animals) of which afterwards the Bones are formed; and so on the contrary, the Bones may be reduced to a thick glewy Water. From which remark it incontestably follows, that seeing the Bones are a Product of the watery Essence, and that they give forth

forth and preserve the Flesh, &c. of the Body, they must needs be the female or watery Essence, out of which the Body is formed, by the masculine or fiery Essence, and elaborated to a perfect Birth.

§ 96. And for as much as, besides what we have already taken notice of, there be some outward parts in Man's Body, which Experience hath taught us, do afford indications of several Diseases; we shall take occasion here to remark some of them. Thus for instance, we find that *there is a very great agreement and proportion, between the Face and the Body*; for he that hath a Mold in his Face, shall find that he hath one also in some part of his Body besides. In like manner, there is a great Correspondence discerned, between the Nose, and the parts appointed for Generation; for he that is troubled with the Venereal Distemper, shall find it seize his Nose and the Roof of his Mouth; because the Seed is elaborated in the Mem-

bers designed for Generation, in order to the bringing forth of a Birth, even as we draw in the Breath through our Nose, which continually keeps us alive. And as every Member hath its proper Motion, so we find that the Face and the Head, do in this differ from all the other Members, that the Skin of them is moveable, and may be contracted, and that the Skin of the Face in some, by shame (which is a Passion or Commotion which we find sometimes rising up from the midst of us to our Faces) colours red, or blushes. So that the Disturbance which the Passion of Shame causeth in the Life, is wrought out, or produceth its effect in the Face, by reason of their great Sensibility, and easie Mobility. And hence it is, that those who blush frequently and easily, do sometimes perpetually retain a Redness in their Face, which the Life works there from the Customariness of Blushing.

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§ 97. But though our Skin be in one place more thin and sensible than in another; yet is it sensible every where, as being nothing else but a Contexture of an infinite Number of little Nerves, as may be easily discern'd through a Microscope, in rough drest Leather. And this nervous Skin, is cover'd with an upper thin and smooth Skin, full of Pores, and small Hairs, by means whereof they receive strength, and give it forth again. Thus we find, that some Persons after that they have been rubb'd with Clothes in the Dark, Flames have been seen to fall from the Clothes. And those that are much disfigur'd with the Small-pox, do lose this upper Skin, and sometimes the Hair also that was there before, in those places where the Small-pox were thickest, and by this means their Sense of Feeling will be much dull'd in those places.

§ 98. Having made mention of the Skin, and its Operation, it will not

be improper to speak something here concerning the Diseases of the Skin, and their Causes. - The Small-pox, which is an Universal Distemper, as being common to the *Africans* and *Americans*, as well as to those of *Europe*, and is caused by the strong impression any one hath of his own Beauty, which Image sent forth by him he takes in again; as when a Person seeing his Face in a Looking-glass, falls in Love with his own Beauty, which Love causeth him to retain his own Image, which is contrary to the Order of Nature; for it is the Property of all Essences to give forth their own Images, and receive those of others, as § 42, 43, but not their own. And this is the reason why we have no Image of our selves, according to that of *James* 1. 23, 24. *He is like a Man that beholds his natural Face in a Glass; for he beholdeth himself, and goeth his way, and strait-way forgetteth what manner of Man he was.* When therefore any one contrary to the Order of Nature

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is thus enamour'd of himself, and takes in his own Image, instead of giving it forth this perverse, or pre-ter-natural Love causeth a Distemper or Disorder in him, and his own Image, which he is in love with for his Beauty begins to plague him; because instead of working it out, or sending it forth, he doth retain and hinder it from arriving at its Perfection, whereupon this Disorder must necessarily follow. For all things that are not advanced towards their Perfection, but are kept back in their elaborating of themselves, must of necessity work in a cross and contrary Manner, seeing that the Operation or Activity of Spirits is never at a stand; but as before they work towards Perfection, so now they exert their Activity as fast to Destruction; and accordingly we see, that many Persons who before were very beautiful, are made deformed by the Small-pox. It happens also sometimes, that when Parents have been enamour'd of their own Image, the said disorder

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disorderly Operation is not actuated but in their Children, and is the Cause of their having the Small-pox. At other times it happens that the Small-pox is got by a Fright, from another that hath this Distemper ; by which Fearfulness or Fright the Spirits that he receives from the sick Person, work the same Disease in him ; because by his Fear and Frightfulness, he hath subjected himself unto them. And therefore we see that Persons, that are not at all fearfull, do converse with such sick Persons, without ever receiving any sickness from them ; because they rule over the Spirits they receive from the sick, and force them to comply with the regular Motion of their own Spirits.

§ 99. It hath been taken notice
§ 97, that we receive and give forth
Spirits or strength through our upper
Skin, which is furnished with innume-
rable Pores, and small Hairs as is vi-
sible in them, who get the Small-pox
from another. So the same is also
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verified in People troubled with the *Itch*, who easily get it from others; though indeed these cuticular Distempers may be also occasioned several other ways.

§ 100. There are also some Persons who are troubled with a malignant Sort of an Itch, which is called the *Leprosie*, which is distinguish'd into several kinds, according to the good or bad Signs it gives forth. In some this Disease is ulcerous and running, in others dry: Some have a white Skin, and their Hair grows white, and falls off, and sometimes yellow Hair is found in the Sore, &c. And because *this malady is not onely in the Skin, but also in the Hair, this makes it so much the more malignant*; for that the Hairs, whose function it is to communicate strength to the Body, do now exert their Activity for its Destruction.

§ 101. Having spoken of the Skin, and the Diseases incident to it, we now

now proceed to add something concerning the Hairs; for as much as they grow out of the Skin.

Magnifying-glasses inform us, that the Hairs are transparent, and full of little Holes like a Cane, which give forth a kind of fatness, as hath been found by Experience; *the Hairs being as it were the Roots of Man, which attract strength and virtue, and communicate the same unto him.*

Experience also informs us, that New-born Children have but little Hair; and that Girls and Boys have no Hair on their Privy Members, till they be of strength to generate. It is found also, that those who have weakned their Life through Debauchery, or have had it impaired by long sickness, have their Hair come off. So likewise Women in Child-bed, and Beasts that have cast their Young, shall sometimes drop their Hair, and Wool, which will be moth-eaten; because their Life in part is communicated to their Young, wherefore their strength is so far diminished, that

that they can no longer support and preserve their Hair from falling.

Others again (as hath already been mentioned) being combed in the Dark, Sparks of Fire have been seen to proceed from their Hair. And there are others, whose Hairs will rise an end upon any great Fright, or like occasions.

From all which particulars we make this Remark, that like as all our Members do give forth and receive Spirits, so the same is true of our Hairs also; and accordingly we find, that commonly Persons who are engag'd in very deep and serious Thoughts, are either bare-headed, or have but some slight Covering on their Heads; because by this means they get more strength for study and meditation. Which reason may be applied to 1 Cor. 11. 4, 5. where an Injunction is laid upon Men, *to prophecy with their Heads uncovered.*

It follows also from what hath been said, that the Hair communicates great force and strength, which is confirm-
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ed also by a common Action of Persons in extream Grief and Despair; who pluck their Hair from their Heads, to make themselves weak and strengthless, though they know not why they do it ; viz. to bring themselves to rest and quiet, and to weaken the Image, which doth put them into so high a Distemper and Disorder. The Scripture also witnesseth concerning *Sampson*, that his strength was in his Hair. The great power and strength of the Hair is likewise confirmed to us, by those who have their Hair coming down their Foreheads in a Peak, who are found to be strong, and much in Thoughts, and studious ; and because they have too much strength in their Heads, therefore it is that many of these grow distracted one time of the Year.

§ 102. *And like as our Hair is not of the same form and qualities in all parts of our Bodies ; so they have in every Part or Member a different Virtue and Operation. For we find that*

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that young Men, as soon as they begin to have a Beard, do attain the strength of being able to generate their like. And because Women are receptive onely and passive, and not active as the Men are, therefore it is that they have no Beard. And it is upon the same account that Eunuchs have no Beards, and have but a weak Voice, as it were without any Life or Vigour; it being observed, that when young Men get Beards their Voice grows more strong, brisk, and lively; because the Hair of the Beard doth strengthen and invigorate the Speech of Men. So that we find there is an Agreement, Correspondence and Harmony between the Hair of the Beard, the Members appointed for Generation, and the Voice. In like manner we experience, that when the little Hairs of the Eye-lids do fall, it occasions a weakness of sight, which is an evident Argument that they contribute strength to them.

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§ 103. And as we find that all the Members of our Body are subject to Diseases, so our Hair also hath its peculiar Distempers, as when they fall off, split, or grow gray, and so lose their former strength.

§ 104. We have shewed § 92, that the Cause of sickness is our apprehensiveness, or aptness to be affrighted, and our Passions, which are excited in us *two manner of ways*, either by Objects from *without us*, or by something we frame *in our selves*.

§ 105. The things that come from without, are either *Spiritual or Corporeal*: The *Spiritual* are so numerous, that it is impossible to recount them all. However we may take notice of some of them in general; thus it is notorious that the Air, according as it is fill'd with malignant Spirits, so it produceth several Sorts of Diseases; as Agues, the Plague, Bloody-flux, &c. And the same may be said of the Spirits we give forth from us,
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by which means others catch Diseases from us, in case they be very apprehensive and fearfull. So likewise we experience that some sorts of Food, whose Life is contrary to ours, do cause Distempers in us. And that most of the Causes of Diseases are Spirits, the Scripture abundantly testifies; thus, *Matth. 8. 16. And he cast out the Spirits with his word, and healed all that were sick.* And *vers. 16.* where mention is made of casting out of Spirits, we are to understand it of Sickneses and Diseases. And *Luke 13. 11.* it is said, *There was a Woman which had a Spirit of Infirmitie eighteen Years, &c.* So that if we may believe Scripture, Sickneses are Spirits, which cause Disorders in us.

§ 106. The bodily means which cause Diseases in us, are things that wound us, break our Limbs, &c. and these also produce in us apprehensiveness and fear: For I have found by Experience, that whenever we do conquer our apprehensiveness, so as

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not to be terrified at the Hurt we have received; but endure it quietly and patiently, that by this means both the Pain is allay'd, and the Hurt healed much sooner. It hath also been found by Experience; that some who have been very dangerously wounded, have escaped; because they were not at all apprehensive or fearfull; whereas other fearfull Persons have died, though they were not near so dangerously wounded.

§ 107. The Sickneses which proceed from within us, arise either from an intemperate and disorderly manner of living, as from over-charging our selves with Meat or Drink, &c. or by thinking too intensely, or by framing a Fright or Imagination to our selves: Whereby our Life is put into a disorderly way of working, and so causeth Diseases, or dies.

§ 108. By these means we see, that some Persons who over-charge themselves

selves with Meat, so as that their Stomach cannot well digest it, by which means a fear or apprehension is begot in them, as § 91. fall into lingring Diseases, and lose their Stomach; because by their intemperance they have weakened the Ferment of their Stomach, and thus sometimes fall into the Jaundice. Others there are who by too much thinking and studying consume more of their strength and forces, than their Stomach can supply life and strength to furnish and maintain their Thoughts, and consequently weaken the life of their stomachs, and hinder the due Digestion of their Meat, and thereby become subject to the Jaundice. Others again have the life of their stomachs spoiled by sickness, or otherways, and thus become liable to the same Disease. For the Yellow-Jaundice is caused by those means which debilitate the life of the stomach, so that it cannot perform its former Operation. Not that the life of the stomach, is so exceeding debilitated, as to leave the
 Meat

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Meat

Meat wholly indigested, but that it is not so thoroughly digested, as to be fit for the Nourishment of our Bodies; as appears from the Excrements of those who are sick of the Jaundice, which yield a putrified Smell, because they are destitute of that living fiery Sulphur, which is found in the Excrements of such who are healthfull; and for the same reason it is that they are pale-coloured. *Persons troubled with the Jaundice, are sensible also of a Difficulty in breathing, &c.* because the Air they draw in is not well digested, or received by their Life; the consequence whereof is, that the Air cannot perform that Operation in them, which is requisite for the support of their Life; and this defect in them of not duly digesting the Air, shews, that Persons sick of the Yellow-Jaundice, by reason of the Debilitation of their Life, and the Ferment of their Stomach, are hindred also from duly digesting the Air they take in; and therefore as soon as the life of the stomach is

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again

again restored to its former strength, the shortness of breath, will cease likewise; and the Blood, Water, Flesh, &c. which in this Disease are colour'd yellow, recover their former lively Colour. And because in the Jaundice not onely the ferment or life of the stomach is debilitated, but the Air also is not well digested; therefore it sometimes happens, that when the Jaundice is of long continuance, it ends in a Dropsie, for reasons set down, § 74. 72.

§ 199. Others by intemperate Eating, Drinking, Anger, Fear, and such like Passions, bring their lives into so much unrest and disquiet, that it produceth *Cramps*, *Convulsions*, and such like. And these nervous Distempers are so much the more dangerous, by how much the disturbance of the life is greater, so that sometimes they end in a *Palsie*, when the disorder in the Life encreaseth.

M 3 § 110. And

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§ 110. And when any one, whether by over-much studying, long continued earnest speaking, violent Passions, or Intemperance in eating or drinking, (of which see § 92.) and such like, doth strain his strength beyond what it is able to bear, by which means the stomach conceives an Aversion, and strives to vomit; whereupon the Party so affected, *will be struck with the Palsie in his left or right Side;* (for man consisting of two parts they both co-operate, as hath been said concerning the Senses and the Brain) so as not to be able to move the Paralytick part. And when the strength of his Life is so far decayed, *that his whole Body be struck with the Palsie,* then all his Members are deprived of Motion. Which Distemper, because it comes all of a sudden, is call'd in Dutch *de Slag*, that is, *the Stroke*. Now if a Patient in this case be not restor'd at the Beginning by inward Remedies, he will find, when he is struck on one side onely with the Palsie, that the

the Members affected will not so soon recover their Motion, because those Members having been at rest for some time, they are thereby made the more indispos'd for Motion; seeing that *Motion is nothing else, but a Customariness of the Lises working the same in the Nerves.* Thus we find that a Child shall never be able to go, if the Life be not brought to a Customariness of moving the Members in such a manner as is necessary for going. Experience also informs us, that Persons who have had their Hands and Feet shackell'd for a great while, so as not to be able to move them, after that their Shackels are taken off, yet are not able to go, as being disaccustomed from progressive Motion, by the too long continued rest of their Members. And therefore those who are in part onely struck with the Palsie, and it have continued upon them for some time, must have their Lives excited, and awakened by certain inward Remedies, and to accustom their Legs and

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Arms to their former Motion: (not only by rubbing and anointing them, which will never restore their Members to Motion.) But they who have their whole Bodies struck with the Palsie, so as that the Life of the Nerves is deviated from its wonted Operation in both sides; then the Life in their Members must be excited not only by inward, but also outward means, and afterwards the Motion be made customary again. But for as much as this Motion cannot be perfectly restor'd by Force, nor in so short a time; (when they have been a considerable time at rest) therefore the Patient must take heed, that at the first he do not attempt to stand or go, because the Nerves having lost their wonted Strength, will continue weak, in case they be strain'd beyond what their Strength is able to bear.

§ III. And as sometimes the Members struck with the Palsie do never recover their former Motion, but continue

tinue lame: So it sometimes happens that Diseases leave onely the lower part of the Body, and at other times the whole Body lame, according as the fear or apprehensiveness form'd in the Head doth work a Disease in the Sinews, and so hinders the Operation of the Life of the Nerves in one or the other Member, and sometimes throughout the whole Body.

And though the Disease be cured, which was the Cause of the *Lameness*, yet the Members continue depriv'd of their Motion, because the Life is become disaccustomed from its wonted Operation.

Others again are seiz'd with a *Lameness* in those parts, where they have before suffered great Pains; because the Life in those parts, by reason of its violent and disorderly Activity (which is the Cause of Pain, as § 66) hath diminished their strength, and is entred into Rest: And for this reason it is, that not onely Motion ceaseth in those that are thus affect-

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ed, but their Member or Members become wither'd.

And because Lameness is caused by all such means as do alter the accustomed Operation of the Life, by which the Motion is affected in the Nerves; consequently *Lameness is nothing else, but that the Life of the Nerves, which before through custom and exercise did elaborate or produce Motion, is now become disaccustomed from effecting the former Motions through rest and quiet.*

§ 112. The Gout and the Foot-Gout, or Podagra, are also Distempers of the Nerves, because all feeling is in the Nerves, and all Motion is performed by them, both which sometimes, by reason of great Pain go to rest; and therefore it is that these Diseases are sometimes occasioned by the same means, from whence the Palsie proceeds, yet with this difference; *that in the Palsie the life all on the suddain goes to rest, whereas in the Gout it does the same lingringly, and by*

By degrees. And for as much as the *Podagra* or Foot-Gout, is so principal and painfull a Disease, I shall therefore speak of it here the more largely.

It is found that some by drinking too hard, Debauchery and inordinate Living, as also by thinking, meditating and writing more than their strength will permit, and other such like, so as that their Life by this means comes to be disorder'd, because they spend more of their strength, than they receive, or can recruit; for we find that the Stomachs of such Persons do not well digest their Meat, and eat but little; as likewise that their Respiration is not free, and as it should be; because the Fire that is in the Air, which is to afford strength to their fiery Life, is not sufficiently or duly received by their own Life; From all which it follows, that seeing the strength and forces of their fiery Life do decay, therefore the watery Essence cannot sufficiently be digested in them,

them, whereupon at first pain ariseth sometime in one Member, other times in another, and this we call the *Gout*, which pain ceaseth again, as soon as the Disorder of our fiery Life is appeased. . But this disorder and pain returning again by fits, our fiery Life becomes more and more depriv'd of its strength, because it spends it self, in enduring these Pains, by which means the Life which is in the utmost parts of the Body, must of necessity be weakened : for as much as it must be continually supply'd and maintain'd by the Life proceeding from the midst of Man, from whence it is most remote. Now the fiery Life in these extream parts being debilitated, and not being able to elaborate the watery Essence, as she was wont, to its full maturity and perfection grows impatient, and endeavours by violence and indisorder to absolve her Operation, which excites a Pain in the extream parts, being accompanied with a Redness and Inflammation, which is called the *Podagra*,

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lagra, or Foot-Gout. And this Disease encreaseth, if a Man addicts himself to those things which are the Causes of bringing his Life into disorder, because by this means the Life is weakened, so that in those Joints the Joint-water; which in a healthy constitution becomes a glewy substance, of which see § 95, in process of time is changed into a hard and stony Substance. And for this reason it is, that *those who are troubled with the Gout, are also afflicted with the Stone or Gravel*; seeing that the watery Essence, by default of the fiery, hath got the Predominion; and though the Pain sometime ceaseth, yet the said stony matter which hath settled it self in their extream Joints, cannot circulate in order to its Renovation. And therefore as soon as they have recovered their strength again, shall on a sudden be seized with their old pains; for their fiery Life striving to expel the stony matter that is fixed in their Joints, or to change it for the better, and not having power to bring it about,

about, because that stony matter is still yet partaker of Life, and therefore cannot be separated, as a mortified Limb is, doth spend it self in this fruitless Endeavour, from whence proceeds a *Secondary Gout*. And such as these shall by reason of the pain wherewith they are again seized in their Joints, where the stony matter is lodged, find a listlessness in their Stomachs to meat; and because they eat little, as not being able to digest much, and consequently cannot receive much strength from what they eat, therefore Nature must by little and little recover them, and restore them again. But the oftner the Pain returns, the more this stony matter in the Joints is encreased, as many have found by sad Experience, that in process of time their Joint-water, instead of being changed into Flesh and Bone, for the recruit and support of their Members, hath been turned into a stony matter, by which means the Flesh and Bones, being no longer renewed by the said Joint-water,

ter, lose their strength. Wherefore we must well take notice of *this two-fold Gout, the first proceeding from the fore-said Causes, and the second from within*; because our Life grows impatient, for that she cannot overcome the congealed matter that is in the Joints. And therefore some Remedies are of good use here, which hinder the encrease of the Gout, as well as the coagulated matter which is in the Joints.

And as the first of these two Gouts is sometimes caused by a dissolute and disorderly way of living, studying, and such like; so the same proceeds also from great Cold endured, or drinking sour Liquors. In a word, the Gout may proceed from all those Causes, which are capable of diminishing the Force of our fiery Life.

§ III 3. The same Causes which produce the Gout in some, causes the *Grauel and Stone* in others, because these Distempers are produced by the Defect of the fiery Life, which defect

fect make the Body of the Urine to settle into a stony matter. In order therefore to a more exact Disquisition about the Nature of this Disease which is so painfull, and withall so common, we must take a particular view of the several parts of the Urine, viz. Fire, Salt, the Body of the Urine, and Water.

That there is a Fire in Urine, the Experiment of the *Phosphorus* is sufficient to convince us, whereof § 9, and as long as the Operation of this Fire is regular, and that the Fire it self continues in its full force, it hinders the Production of Diseases; for being the Former of the Body, it preserves what it self made, as § 39. And therefore the Urine of sound and healthy Persons is clear as Sack, and hath but little settling. But when even this fiery Life, and the Salt which is a Birth of the Fire, as § 14, is deficient, or less powerfull in its Operation; then the Body of the Urine becomes changed into Stone or Gravel, which any Body may make an

an experiment of, by putting fresh Urine every day into an Earthen Vessel, renewing the same every Twenty four Hours; and letting it stand during that time expos'd to the Air, several stony Crusts will be found sticking to the Bottom; in like manner as the Stone and Gravel grows in the Kidneys, or Bladder of a Man, which is of the same appearance and qualities, as these Crusts that stick to the Bottom of Chamber-pots. And indeed it is impossible, according to the Order of Nature, but that the gross Body of the Urine must become stony; because the first Birth that proceeds from the Water is Sand and Stone, (as I have demonstrated in my *Physiological Cogitations*;) if so be therefore the Body of the Urine, which is an imperfect Essence, doth not attain its full maturity, or hath its qualities alter'd, from the want of Fire and Salt, then the stony Body of the Urine must proceed in its Operation of producing Sand or Stone.

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Yet there are some Remedies that are of great use to prevent the Encrease of the Stone or Gravel.

From which infallible Truths we may conclude, that the Gravel and Stone (except they be Hereditary, and born with one) are produced by means which either bring the Life into disorder, or diminish its force and vigour, which means or causes have been sufficiently declared in the preceding Sickneses.

§ 114. As these fore-mentioned Diseases, the Cramp, Gout, &c. have their residence in the Members or Joints, which by means of the Nerves, that derive their Original from the Brain, do effect or elaborate whatsoever we think, or resolve: So there are some Distempers which arise immediately in the Brain, whether by Causes that produce a suddain disorder and disturbance in the same, which sometimes proceed from some Deviation of the Stomach; or from
too

too long continued or intense Study, beyond what the Strength of the Party permits, and other such like; which Diseases when they proceed no further than to cause an apprehension, as if the Party were ready to fall; or as if all things turn'd round, it is called a *Dizziness or Swimming of the Head*; when it seizeth one like Sleep, it is called *Fainting or Swooning*, which is a kind of *Falling-sickness*, when it is so strong as to make the Patient fall down.

§ PR5. And like as there are several Sorts of *Falling-sicknesses*, so are their Causes also different. Thus we find that some by too much thinking, do so far deprive themselves of sleep, that at last their Life for want of strength, passeth into a violent and preternatural Sleep. This Disease may also be caused by too violent Passions, as by great Frights: Thus we find that some, by seeing others seized with a Fit of the *Falling-sickness*, have been

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so frightened therewith, as to get the same Disease, whereof we have spoken § 85 and 91. And as some have the Falling-sickness seizing them with Fainting, and are still and quiet in their Fits; so others have this Distemper come upon them with Convulsions and violent Motions, others bite, foam at the Mouth, and make a Noise, &c. according as the Spirits that have got the Predominion over them, are more or less violent in their Operation. Which is the reason why those that have this Disease, are not all afflicted with the same violence; for some are onely deprived of Motion, their Sense of Hearing still continuing; others again are dejected of Motion, Feeling and Hearing. We have a clear and lively representation of an extraordinary Falling-sickness set before us, *Matth. 17. vº 14. Mark 9. 16. Luke 9. 37.* Where this Disease is called Lunacy.

§ 116. Others.

§ 116. Others that are seized with a continual Sorrow or Dissatisfaction, whether for the Loss of their Goods, or because they cannot obtain what they desire, do sometimes weaken their Life to that Degree, through these continued Thoughts, that afterwards it hath not strength enough to digest so much Meat as is sufficient to repair and maintain their strength, by which means their strength daily decays; whereupon an extenuation and withering of the Body follows, which we call a *Consumption*. Others again fall into this Distemper by having *Fistula's*, and other running Ulcers upon them, which by their continual running, make them to lose more of their strength, than the Stomach can repair or recruit from the Food they eat. In others a Consumption is the Consequence of a Cough, which making the Patient to spit up much Phlegm, and being become habitual; for as much as by this their continual spitting, they void more

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strength

strength than they receive, the Phlegm which they evacuate being the Offspring of the Gristles, according to § 76, 78, are an unripe Fruit, which when advanced to its full Maturity and Perfection, serves for the support of our Body : But whensoever this Phlegmy matter is generated continually and in great quantity, they diminish the strength of our Life ; by which means all the other parts of the Body suffer for it, except this disorder be timely amended and reduced by an orderly way of living, and good Medicines. Others get a Consumption either in some part, or their whole Body, by reason of great and extraordinary Pains, or long continued Agues, by which means the strength of the Body is by degrees diminished. It appears therefore that this Disease may proceed from many Causes, which are capable so far to disorder our Life, as that afterwards it is no longer able sufficiently to take in or digest the fiery Essence of the Air,

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Air, for the support and Conservation of her own Activity. To conclude, one thing is well to be noted in this Disease, *viz. that a Consumption sometimes consists in a defect of the fiery Life, and at other times in a deficiency of the lunar or watery Essence,* out of which the Body is formed, Man consisting of these two, as hath been shewed § 9.

§ 117: Some that strain their strength too much either in writing, studying, fixing their Eyes upon any thing too long, or by over-working themselves, &c. shall sometimes find themselves seized with a *Shortness of Breath*, or a difficulty in breathing; because when they are intensively eying or thinking of any thing, they commonly fetch but little Breath. Persons also that are fat, are very subject to this Distemper; because in them the Air being not well digested becomes changed into Fat. All which Instances make out, that those who

are troubled with a difficulty of breathing, have had their Life by several means either brought to a Rest and Inactivity, or else very much diminish'd in strength, which is the Cause why the Air is not well digested in them; so that they have as it were an Aversion to it, which makes them draw in their Breath with difficulty, and cough often. Whosoever shall compare together what hath been deliver'd before concerning Coughs and Consumptions, with what hath been now said concerning difficulty of breathing, will find that these Distempers are so nigh of kin, that one of these Distempers will frequently arise from another of them, or at least proceed from the same Causes.

§ 118. And as many Diseases are caused, for that the watery Essence gets the Predominion in us, either because of the Disorder of our fiery Life, or because of its weakness (the most

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most of which Diseases we have already treated of) so there are others which proceed from the too violent Operation or Activity of our fiery Essence, which Sickneses are painfull and grievous; because Pain, which is nothing else but an over great or exceeding Sensation, proceeds from our Life, which is the Cause of all Sensation, according to § 66. Now these grievous Sickneses are not indeed of any long continuance, but very dangerous (if either the Life do not reduce it self into order again, or that the same Effect be procur'd by fit Remedies;) because our Life by its vehement Activity, doth in a short time deprive it self of all its strength, and so dies. This is apparent in the *Pleurisie*, wherein our Life, either by too violent Motion, or when after some great Heat, we suffer our selves to cool too suddainly, or several other ways, is put into an over vehement Activity, of which the *acute Pain* is a certain Indication, as also the *short*
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fetching of ones Breath, to the End that we may not take in so much of the fiery Essence of the Air, as hath been said. § 67.

The same is also found by Experience in the *Cholick, Pains in the Belly, &c.*

§ 119. Having spoken in general of the Cause of Diseases, and the means whereby they are occasioned; we proceed now to speak something of the *Difference of Diseases.*

The general Cause of all Sickneses, is either *some disorder our Life is put into, or its Decay and Weakness;* Whereof see § 92. And as long as *our Life proceeds in that Disorder, so long the Sicknes encreaseth.*

§ 120. *That Diseases proceed from some Disorder of our Life;* may be cleared from the following Instances. One that is sick of an Ague will be sometimes cold, and at other times hot, which is an Argument, that there is a Disagreement between his
fiery

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fiery and watery, or hot and cold Essence; for when these are in Union and Harmony, he will find himself in a due Temperature of Heat and Cold, and consequently no longer sensible of the Ague. So likewise in the Pleurisie, Cholick, and other painfull Distempers, in all which our Life is in a great Disorder, upon the Removal or Cessation, whereof the Pain ceaseth likewise.

§ 121. And as all Men are not alike Patient; so we find that many *by their impatience and peevish Humour do inflame this disturbance of their Life*; and thereby not onely prolong their Distemper, but also make it worse, as hath been shewed concerning the impatient Cough § 79.

§ 122. When a Disease proceeding from Disorder, and encreased by impatience, hath continued for some time; it oft happens that though the first Disease, *viz.* the continual Distur-

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Disturbance and Disorder of our Life
 ceaseth ; yet the Disease out of Cu-
 stomariness and Habit, may return at
 Set-times. Thus for Example, a Fea-
 ver or continual Ague, sometimes
 turns to a Quotidian or Tertian : which
 having continued for some time, if
 the Life be not strong enough to al-
 ter this Custom or Habit, frequently
 is changed into a Quartan, which
 returns at its set Period. For sure it
 is, though may be it escapes our Ob-
 servation, that each Essence bears sway
 in its own set time, as is most incon-
 testably evident in some lunar Di-
 stempers, and Persons afflicted with
 the Dropsie and Distraction, or Mad-
 ness, as also in Women's Courses.
 And the Famous Astrologer, *Francis-
 cus Leever*, hath frequently obser-
 ved, that those Thoughts, which he
 had not fully elaborated, have re-
 curr'd upon him as soon as the Moon
 was return'd to the same Point, where
 he was, when those Thoughts first
 rose up in him. And when our Life
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by means of this long continued and habitual Disorder or Sickneſs, becomes debilitated, then other Diſeaſes proceed from this Weakneſs of our Life; as Conſumption, Dropſie, and the like. Experience alſo teacheth us, that thoſe who by abandoning themſelves to their ungovern'd Paſſions, and an irregular Courſe of living, have contracted the Gout, Gravel, Convulſions, the Cramp, Lameneſs, Swimming in the Head, Falling-ſickneſs, Shortneſs of Breath, and the like, that theſe Diſeaſes out of Cuſtomariſs continue with them, becauſe their Life is not ſtrong enough to conquer them; after the ſame manner as one that hath accuſtom'd himſelf to much eating, drinking, &c. cannot leave it, becauſe it is become habitual to his Life.

§ 123. Having ſpoke of the Cauſes and Differences of Diſeaſes, we proceed now to obſerve ſomething concerning the Remedies proper for the Removal of them. We

We have already more than once asserted, that no Cure or Recovery is to be expected from any Remedies, when our Life begins to decay and die, because the Remedies cannot be received or taken in by the Life. In like manner it is a certain Truth, that as long as our Life doth continue the Disorder in us, no Remedies can be of use to remove it; because our Life in this Case, doth not duly elaborate what it receives, or takes in.

And the same may be said of Hereditary Distempers, that are born with us. For the Life having been so long accustomed to produce these Disorders, and having brought them with us into the World (of which Diseases we intend elsewhere to speak more particularly) therefore it is very difficult to cure such Distempers.

§ 124. And as in the foregoing Discourse, it hath been made out that the Causes of Diseases, are some Appre-

prehensions or Passions we awake in
 our selves, whether by outward or
 inward, Spiritual or Bodily means,
 which Causes being spiritual consist
 onely in our Thoughts; therefore no
 better means can be found out for the
 removing of these Causes, than that
 we make use of such a Remedy, as is
 of the same Nature with the Cause,
viz. that seeing the Fright and other
 Passions are disorders, that we endea-
 vour by all means to be patient and
 calm, bearing the Irksomness of our
 Sickness with all Patience and Con-
 tentedness; yea, that we love and
 embrace it, as knowing that it does
 us a kindly Office, in acquainting us
 that our Life is in disorder, and by
 this means put us upon the Endea-
 vour of restoring of our Life to its
 due Order and State again; for if we
 were not sensible of the Painfulness of
 Sickness, we should be ignorant of
 any Disorder that is in us, and so
 should proceed on in the same, with-
 out ever endeavouring to reduce it,
 and

and by this means would abbreviate our Lives.

When we thus consider Sickness as conducive to our good and profit, and according to the Intimation it affords us, change our former Course of living ; then the Fright or Apprehension, which caus'd the Disorder, ceaseth, and on the contrary, a Joy and Delight ariseth in us, because it points us to what is defective in us. Now that this Joy and Patience is a certain Remedy against Diseases is evident ; for when we are by Patience come to a Union and Agreement with the thing that at first awakened the Fright, or other Passions in us, it of necessity follows, that the Fright or Passion whatsoever it be must be changed, because we now love and are perfectly reconciled to that thing which was the Object of our Fear, &c. so that our former Fright or other Passion is now changed into Love and Good-liking ; which Love and Complacency, being opposite to the former

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mer Fear and Apprehension, must by consequence change our Sickniess into Health; for the same reason that the Fright and Aversion changed the due and orderly Operation of Nature into Disorder or Sickniess. But yet we are to take notice, that this means cannot be used with the same Success in Diseases mentioned § 123. because the Life hath not Power enough to overcome those Distempers.

And that many Diseases may and must be overcome by Patience, is a thing I know by Experience, for that a certain Patient having made use of all Remedies proper for his Distemper, without any Success, the Disease still growing upon him; when he came to consider that the Sickniess pointed him to the means of his recovery, and that thereupon he began to love it, and be reconcil'd with it, he presently found himself rid of his Sickniess, and from all the Pains and Irksomeness of it.

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§ 125. And

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§ 125. And seeing that this means is not in the Power of the Physician, but in that of the Patient; therefore it is, that a Physician will find it a difficult Task to cure an impatient sick Body, and therefore the Patient must endeavour to procure himself this Temper, by the Considerations before mentioned. Yet if the Patient have a strong Faith, that the Physician is able to cure him, by which Faith or Confidence the Patient takes in the Words (which are spiritual Essences, according to § 76.) of his Physician which produce in him Patience, and Acquiescence; if so be the Physician stand in full Freedom and Boldness, that is, that he do not undertake to cure the Patient, without being assur'd of the means whereby he can effect it; for otherwise a Fear and Disturbance will arise in the Physician, and will render his words dead, and without Power, and which being received by the Sick, will not be able to rectifie the Disorder that

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is in him. But when the Physician stands in perfect Freedom, and is absolutely free from Fear, because he fully understands the Cause of the Disease, accordingly his words will be living, and powerful, and being taken in by the Sick, will change his Impatience into Patience and Health. It happens also sometimes, that the Patient having a strong Faith in the Goodness and Virtue of the Medicaments, he makes use of, and by this means become patient and satisfied, and so overcomes his Disease, that is, the Disorder awakened in his Life. And this is the true reason why two Persons afflicted with the same Disease are not recovered sometimes by one and the same Remedy, because the one hath Faith in it, and the other not. And for the same reason, that several Physicians exhibiting the same Remedies; some of them shall cure their Patients therewith, whilst others shall want that Success, because some are able to excite the Faith

of their Patients ; whereas the words of others being without Life and Efficacy, are not capable of awakening the same Confidence in their Sick, and consequently the Remedies they exhibit are without Success.

§ 126. And for as much as it hath been said, § 122, that many Diseases through length of time become customary and habitual, so that the Life is not strong enough to conquer and expell them, therefore in these some good Remedies are of great use; for being received by our Life, they do help and assist it to change that Custom, to which it hath been habituated, and this by pacifying and quiering of our Life, by which means this habitual Disorder must die.

§ 127. But in Diseases wherein our Life is too resty, and cannot perform its wonted Operation, as in the Falling-sickness, the Palsie, Convulsions, and such like, such Remedies are most pro-

proper, which either outwardly or inwardly do excite our Life.

§ 128. In Diseases where the Stomach is disorder'd, and hath an Aversion from Meat, because the Life or Ferment of the Stomach is become restless or inactive, and endeavours to discharge that which it is burthen'd with by Vomit, *Emeticks or Vomiting Medicines are very proper*; as in the Beginning of the Apoplexy, where the Life is hindred in its usual Operation; but not in Cases where the Life it self dies. And I have found several times, that by this means a Patient that have had one half of his Body struck with the Palsie, so as that he could not move it at all, hath been restored the same Day. So likewise an Emetick is of great use in the Beginning of the Small-pox, and in other Cases where Nature seems inclined to vomit.

Q 3

§ 129. And

S 129. And when ever it happens that the Physician visiting his Patient, notwithstanding his most diligent Search and Enquiry, is not able to find out the Original of the Disease, in order to adapt his Remedies accordingly; it is better for the Physician to depart at that time without prescribing any Remedies, than to order any thing of the Effect whereof he is uncertain; because otherwise instead of removing the Sickness, he will oftentimes encrease and inflame it. But when he hath fully inform'd himself (by questioning the Sick or those about him) of all Circumstances, and the Patients manner of living; and from considering all those heedfully, to find out the true Cause of his Patients Distemper, sometimes of a sudden it will dart into his mind, what is most proper to remove it. In like manner, as Experience teacheth us, that sometimes after we have been studying and hammering of a thing a long-time together, without
being

being able to discover the Cause or Efficiency of it, that afterwards of a suddain the thing will be fully discover'd to us.

Having thus made out and evidenced these Observations about Diseases in general from Experience, and the Nature of things; I doubt not but the Understanding and Consideration will find these Remarks true in their Patients, and thereby be the better enabled to find out the Causes of Diseases, and according to the same adapt their Medicines; especially after that in the second part of this Discourse, they shall have taken a View of their Virtues and Properties of Medicaments, or means of curing Diseases.

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